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DEPARTMENT OF EDUCATION

REGULATIONS

OF THE

DEPARTMENT OF EDUCATION

FOR THE YEAR ENDING

JUNE 30th, 1939

RELATING TO THE

PROGRAMME OF STUDIES

AND ANNUAL EXAMINATIONS

FOR

HIGH SCHOOLS

(GRADES X, XI, AND XII)

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TABLE OF CONTENTS

	Page
Revision of the High School Programme	3
Completion of Grade X or XI Units	4
Grade XII Programme	5, 156
Departmental Examinations	5
Normal School Entrance	6, 12
University Matriculation	6, 14
Music—Private Study	7, 8
Subjects of First Year—Grade X	9
Subjects of Second Year—Grade XI	11
Recommendations for Credit	15
English—Literature and Language	21
Social Studies 1 and 2, Sociology and Psychology 1	28
Health and Physical Education (including Physical Education 2)	61
Mathematics—Algebra, Geometry, General Mathematics 1 and 2	74
Science—Biology, Chemistry, General Science 1 and 2, Geology, Physics	76
Languages—Latin, French, German	97
Art 1 and 2	100
Dramatics 1 and 2	108
Music 1 and 2	116
Commercial Subjects—Bookkeeping, Typewriting, Steno- graphy, Commercial Law, Office Practice	124
Technical Subjects—General Shop 1 and 2, Shop Subjects, Mechanical Drawing, Home Economics 1 and 2, Needlework	127
Vocations and Guidance	143
Grade XII (Old Course)	156

REGULATIONS

PRELIMINARY NOTICES.

1. The attention of Principals and school authorities generally is directed to the important fact that Grade IX is no longer a part of the High School Programme.

2. Students who proceed to Grade X work are required to hold complete Grade IX standing, and to have been promoted to Grade X by the High School Entrance Examination Board. The Grade IX Diploma (Grade "A", "B", or "C") will be evidence of promotion.

3. Principals are asked to note carefully the conditions of promotion to Grade X for each of the three "Grades", or categories, as stated on pages 16 and 17 of the *Programme of Studies for the Intermediate School*.

REVISION OF THE HIGH SCHOOL PROGRAMME

1. The High School Programme is under revision. During the year 1938-39, the revised Programme for Grades X and XI shall be used in all schools of the Province where this Grade is taught; but the unrevised Programme for Grade XII shall continue in use as before. The revised Programme for Grade XII will be introduced in September, 1939.

2. Students admitted to Grade X in September, 1937, or thereafter, or admitted to Grade XI in September, 1938, must proceed with the revised Programme for Grades X and XI.

3. The following subjects of the unrevised Programme for Grades X and XI have either been dropped from the revised Programme or superseded by other subjects: History 2, History 3, Agriculture 2, Arithmetic 1 and Geography 1. Teachers and students are advised that there will be no Departmental examinations in these subjects in June, 1939; nor will credit be granted for work done in any of them during the year, whether under classroom or correspondence instruction.

4. Students holding credit in one or more units of the unrevised Programme for Grade X or XI may complete the remaining

units of such programme under the unit system, but only by obtaining a 50% standing in each of the corresponding subjects of the revised Programme, as shown in the Schedule below. (See No. 3, preceding.)

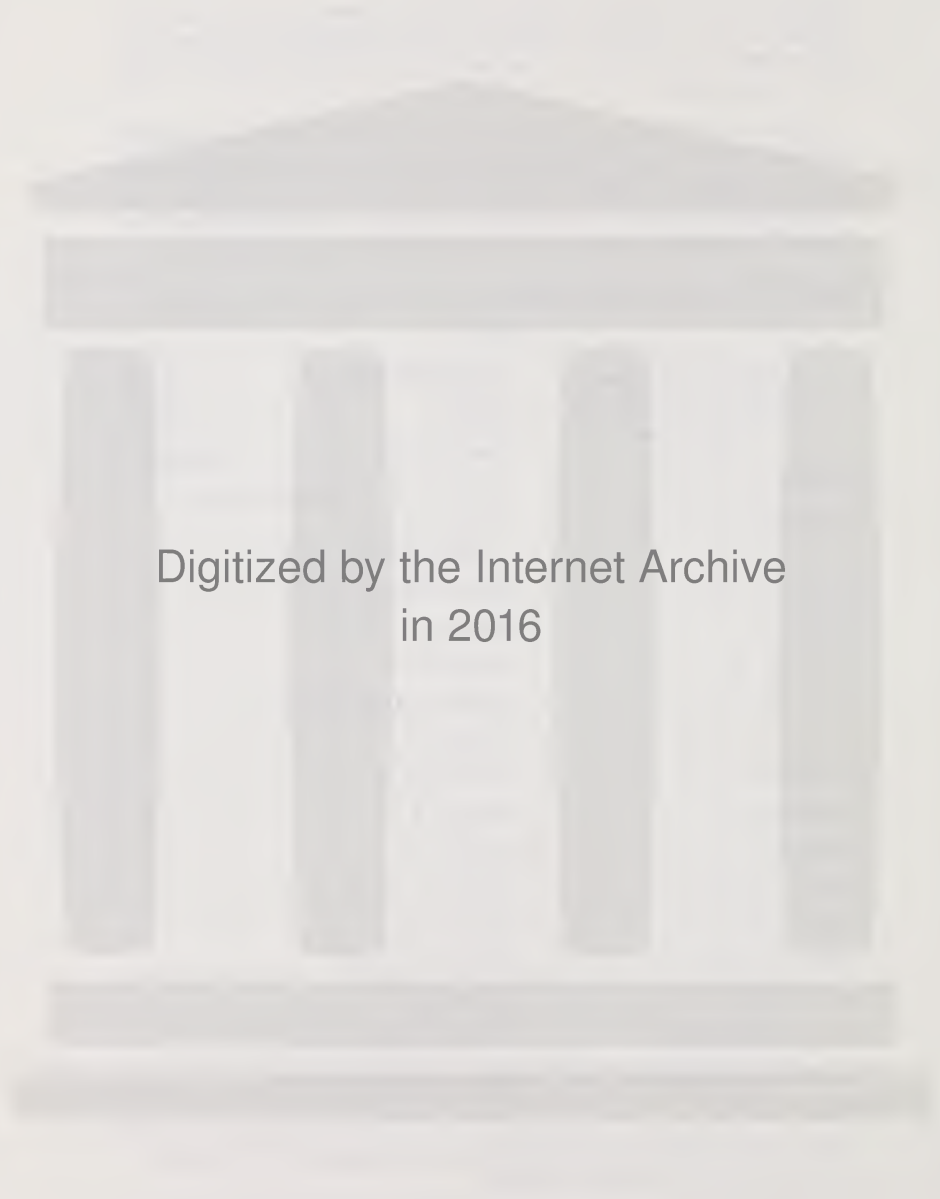
Such students may, however, elect to proceed under the credit system of the revised Programme; and for such purpose they may have the units in which they hold credit valued as credits, not exceeding **thirty-five** for Grade X subjects and **thirty-five** for Grade XI subjects, according to the Schedule which follows:

SCHEDULE FOR COMPLETION OF GRADE X OR GRADE XI
UNITS.

Units of Former Grade X or Grade XI Programme.	Corresponding Units of New Programme.	Value under Credit System.
Literature 2 or 3.....	English 1 or 2 (Literature part) .4.	
Composition 2 or 3.....	English 1 or 2 (Composition part) 3.	
History 2 or 3.....	Social Studies 1 or 2.....5.	
Algebra 2	Algebra 1	5.
Geometry 2	Geometry 1	5.
Arithmetic 1	General Mathematics 1.....5.	
Physics 1	Physics 1	5.
Chemistry 1	Chemistry 1	5.
Agriculture 1	Biology 1	3.
Geography 1	Geology 1	3.
French 1 or 2.....	French 1 or 2.....	5.
Latin 1 or 2.....	Latin 1 or 2.....	5.
German 1 or 2.....	German 1 or 2.....	5.
Art 1 or 2.....	Art 1 or 2.....	4.
Manual Arts 1 or 2.....	General Shop 1 or 2.....	4.
Household Economics 1 or 2..	Home Economics or 2.....	4.
Music 1 or 2.....	Music 1 or 2.....	4.

N.B.—1. A similar arrangement may be made with respect to Commercial and Technical subjects.

2. Agriculture 2 has been dropped from the High School Programme.



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SUBJECTS OF GRADE XII—UNREVISED

1. The subjects of the Third Year of the unrevised High School Programme (Grade XII) are as set forth in the following Table:

THIRD YEAR (UNREVISED)—GRADE XII.

Normal Entrance		Commercial	
English	Literature 4	Literature 4 Advertising and Salesmanship 1 Mathematics 3 Book-keeping 3 History 3 Practical Office Training 1	
	Composition 4		
[2 units]			
Physical Education		Physical Education	
And six units to be chosen from the from the following:		And one of the following:	
History 4, History of English Literature 1,		Commercial French 3	
Algebra 3, Geometry 3, Trigonometry 1,		Physiology and Hygiene 1	
Physics 2, Biology 1, Chemistry 2,		Art 1	
German 3, French 3, Latin 3, Greek 3,		Any unit of the third- and fourth-year	
Music 3.		Academic programme not taken pre- viously.	

†Only schools having proper laboratory facilities and equipment should offer Courses in Chemistry 2.

N.B.—For information respecting content, prescription and text-books in these subjects, see page 156.

2. The annual Departmental Examinations for the subjects of Grade XII will be held between June 10th and June 30th, upon such days and at such places as may be determined by the Minister of Education.

3. Every candidate who wishes to write upon any Departmental Examination shall, *not later than April 15th*, make application to the Department. Special forms are furnished for this purpose, and will be forwarded to Principals of schools on request.

4. The Principal of every school having candidates for the Departmental Examinations of Grade XII shall, between June 1st and 15th, forward to the Department of Education a confidential report on each candidate, under the following heads: length of time preparing for examination; regularity of attendance; ability; attitude towards work; physical fitness; relative standing in class. Where possible, percentages based on the candidate's work during the year should be given. Special forms are furnished for this purpose.

5. The following fees are prescribed in connection with Departmental Examinations:

For each unit—\$1.00 up to a maximum of \$6.00 for the Grade XII examinations.

The examination fees shall be paid to the Presiding Examiner on the first day of the examination.

The fee for appeals shall be \$1.00 per paper. If an appeal is sustained, the fee will be refunded.

NORMAL SCHOOL ENTRANCE.

All students qualifying for Entrance to Normal School in September, 1939, must hold credits in the following subjects of the Alberta High School Course (unrevised):

1. English Literature 1, 2, and 3.
2. English Composition 1, 2, and 3.
3. History 1, 2, and 3.
4. Algebra 1 and 2.
5. Geometry 1 and 2.
6. Arithmetic 1.
7. Art 1.
8. Geography 1.
9. General Science 1.
10. Physics 1 or Agriculture 1.
11. Chemistry 1 or Agriculture 2.
12. Two units to be selected from either (a) or (b), below:
 - (a) Either Latin 1 and 2 or French 1 and 2 or German 1 and 2 or Greek 1 and 2.
 - (b) Art 2, Music 1, Music 2, Manual Training 1, Manual Training 2, Household Economics 1, Household Economics 2, the Science subjects not already chosen.
13. English Composition 4, English Literature 4.
14. Six units to be selected from the following: History 4, History of English Literature 1, Algebra 3, Geometry 3, Trigonometry 1, Physics 2, Biology 1, Chemistry 2, Latin 3, French 3, German 3, Greek 3, Music 3.

N.B.—Normal Entrance requirements of the revised High School Programme will become effective on June 30, 1940.

UNIVERSITY MATRICULATION.

1. Matriculation requirements vary in the different Faculties of the University of Alberta, and with reference to the particular Course to be pursued.
2. For full information respecting matriculation requirements, students should consult the Matriculation Bulletin of the University.
3. Students who propose to enter the Faculty of Arts of the University of Alberta are now required to secure matriculation in but one foreign language.
4. Matriculation Scholarships will be awarded on the results of the Grade XII Examinations to be held in June, 1939.

THE GENERAL COURSE—UNREVISED PROGRAMME.

(High School Graduation Diploma)

Students who have completed all of the following requirements on or before September 1, 1938, will be granted a **High School Graduation Diploma**:

1. Credit in six units of the former Grade IX Programme.
2. Credit in fifteen units of the unrevised High School Programme, including Physical Education, four units of English, two of which must be Literature 3 and Composition 3, and at least six units in all chosen from subjects of the Second and Third Years.
3. Eight additional units in subjects of the Third Year.

CREDIT FOR PRIVATE STUDY OF MUSIC.

1. The Department will recognize for credit the certificates of the principal Boards conducting examinations in Music in the Province. Standing in both Practical Proficiency and Theory is required.

2. Students who have taken private instruction in instrumental Music, including both Theory and Practical Proficiency, may be granted credit in **Music 1, 2 or 3 of the unrevised High School Programme**, on presenting one or more of the certificates or diplomas named in the following Table:

Examining Boards	Music 1		Music 2		Music 3	
	Practical	Theory	Practical	Theory	Practical	Theory
University of Toronto— Toronto Conservatory	Grade VII.	Grade II.	Grade VIII.	Grade II, and Grade III Harmony.	Grade IX.	Grades II and III, complete.
Western Board of Music	Grade VI.	*Grade IV.	Grade VII.	†Grade V.	Grade VIII.	‡Grade VI.
McGill University— McGill Con- servatorium	Inter- mediate Grade.	Junior Grade.	Senior Grade.	Junior Grade.	Highest Grade.	Inter- mediate Grade.
Associated Board of Royal Schools	Grade V.	Grammar of Music, Grade III.	Grade VI.	Grammar of Music, Grade IV.	Grade VII.	Harmony, Grade IV.

*Without the History.

†With Grade IV History.

‡With Grade V History.

3. The Department of Education conducts annually the examinations of the Western Board of Music for Grades below the Associateship and Licenciateship. The theory examinations of the Western Board are held in February and in May of each year, and the practical examinations are held in June. Candidates who desire to take the Western Board Examinations are requested to notify the Department not later than January 1st, or May 1st, as the case may be.

N.B.—These examinations are for students who take private instruction in instrumental or vocal Music, and not for students who take the High School Courses in Music.

4. First-year or second-year high school students who have taken private instruction in Piano, Violin or Vocal Music may be granted credit in Music 1 or Music 2 of the revised High School Programme, on presenting certificates or diplomas in both Practical Proficiency and Theory from one of the principal Boards conducting examinations in Music in the Province. With respect to the Western Board of Music, the certificates required are as shown in the Table which follows. Similar information with respect to the other Boards may be had on request.

High School Course	WESTERN BOARD CERTIFICATES REQUIRED			
	Piano	Violin	Singing	Theory
Grade X (Music 1)	Grade VI	Grade III	Grade I	Grade IV, without History
Grade XI (Music 2)	Grade VII	Grade IV	Grade II	Grade V, with Grade IV History
Grade XII (Music 3)	Grade VIII	Grade V	Grade III	Grade VI, with Grade V History

THE REVISED PROGRAMME FOR GRADES X and XI.

A Definite Time Schedule

The revised Programme for Grade X is the First Year, and the revised Programme for Grade XI the Second Year, of a new three-year *Programme of Studies for the High School*, which is based on a definite time schedule. The school day comprises eight class periods, of which **one** must be a **study period**. During each of the three years of the programme, thirty-five class periods per week will be available to students for instruction. The amount of time available for classroom instruction will not only affect the quality of the instruction but will also determine the number of credits that students may earn.

Programme Not Divided

The revised Programme for Grade X, introduced in the *High School Regulations* of last year, was set forth in five divisions or

"courses", to which the following designations were given: General, Normal Entrance, Matriculation, Commercial and Technical. Although these "courses" were stated to be "merely convenient groupings of subjects, to fit special types of school, staff, equipment and organization, the designations attached to them have led to confusion and misunderstanding, importing into the new Programme the rigidity of the old.

These designations have therefore been dropped. There is only one "course", which is the undivided Programme, comprising a few required subjects and many "electives". In the larger schools of a "composite" type, it should be possible, at least theoretically, to offer the student an individualized programme.

THE HIGH SCHOOL DIPLOMA.

The successful completion of a year's work in any of the subjects of the new Grade X or Grade XI Programme will entitle the student to as many credits as the number appearing in brackets after the name of that subject as it appears on the list. In one year the student should therefore earn thirty-five credits; and in three years, approximately 105 credits. **Students who complete the three-year Programme, earning 100 or more credits, will be granted the High School Diploma by the Department of Education. This Diploma will be the same for all students, no matter what subjects have been taken.**

The issue of special diplomas, such as the present Commercial Diploma, will not be continued.

LIST OF SUBJECTS

FIRST YEAR—GRADE X

The following is a complete list of the subjects in which instruction may be offered to Grade X students.

The number in brackets after the name of each subject indicates the number of credits carried by the subject, and also the amount of instruction time in periods per week to be devoted to it.

For outlines, requirements, textbooks and reference books, see pages 21, 28, under the headings, "English", "Social Studies", etc. See also the Table of Contents.

I. COMPULSORY SUBJECTS—Required of all students:

English 1. [5].

Social Studies 1. [5].

Health and Physical Education 1. [3].

II. ELECTIVES:

Group A.—Academic:

(Not more than *three* subjects to be elected.)

Algebra 1. [5].

Latin 1. [5].

Geometry 1. [5].

French 1. [5].

Chemistry 1. [5].

German 1. [5].

Physics 1. [5].

Group B.—Commercial:

Book-keeping 1. [5].
Stenography 1. [5].

Typewriting 1. [5].

Group C.—Technical:

(Not more than *two* subjects to be elected.)

Woodwork 1. [8].

Arts and Crafts 1. [8].

Metal Work 1. [8].

Fabrics and Dress 1. [8].

Electricity 1. [8].

Home-making 1. [8].

Printing 1. [8].

N.B.—For a Shop Course, the **eight** periods a week will be distributed in the following manner:

Drawing and Design—2;

Theory—2;

Shop Practice—4.

For two Shop Courses, **fifteen** periods a week will be required (not sixteen).

Group D.—General:—(Called "Optional Subjects" on page 9 of the *High School Regulations* for 1937-38.)

*Dramatics 1. [4].

*Bookkeeping 1a. [3].

*Music 1. [4].

*Stenography 1a. [3].

Art 1. [4].

*Typewriting 1a. [3].

*Mechanical Drawing. [3].

*General Shop 1. [4].

General Mathematics 1. [5].

*Home Economics 1. [4].

General Science 1. [5].

Needlework. [3].

Biology 1. [3].

Vocations and Guidance. [1].

Geology 1. [3].

*Special qualifications required of the teacher.

Directions re First-Year Electives

1. Students who have been promoted from Grade IX with a "Grade B" standing may elect, during the first year, not more than **two** of the subjects included in the following three classes and not more than **one** subject from a class:

(i) Algebra 1 or Geometry 1;

(ii) Physics 1 or Chemistry 1;

(iii) Latin 1, French 1, or German 1.

Students who have been promoted from Grade IX with a "Grade C" standing may not elect, during the first year, any of the subjects mentioned in the foregoing paragraph.

2. No student may elect, during the first year, more than **three** subjects from Group A; nor more than **two** subjects from Group C.

3. (a) Students who elect Algebra 1 or Geometry 1 from Group A shall not elect, during the same year, General Mathematics 1 from Group D.

(b) Students who elect Physics 1 or Chemistry 1 from Group A shall not elect, during the same year, General Science 1 from Group D.

(c) Students who elect **Bookkeeping 1**, or **Typewriting 1**, or **Stenography 1** from Group B shall not elect, during the same or a subsequent year, **Bookkeeping 1a**, or **Typewriting 1a**, or **Stenography 1a**, respectively, from Group B.

(d) Students who elect a shop course from Group C shall not elect, during the same or a subsequent year, **General Shop 1** or **Home Economics 1** from Group D.

4. Instruction in the subjects of Group B or Group C may be given only in schools approved for this purpose by the Department of Education.

5. Students desiring to prepare for University Matriculation or Normal Entrance should elect the subjects necessary to meet the requirements in either case.

SECOND YEAR—GRADE XI

The following is a complete list of subjects in which instruction may be offered to Grade XI students.

The number in brackets after the name of each subject indicates the number of credits carried by the subject, and also the amount of instruction time in periods per week to be devoted to it.

For outlines, requirements, textbooks and reference books, see pages 21, 28, under the headings, "English", "Social Studies", etc. See also the Table of Contents.

I. COMPULSORY SUBJECTS—Required of all students:

English 2. [5].
Social Studies 2. [5].

II. ELECTIVES:

Group A.—Academic:

(Not more than **three** subjects to be elected. Of those elected, not more than **one** may be the first unit of a language.)

Algebra 1. [5].	Latin 1 or 2. [5].
Geometry 1. [5].	French 1 or 2. [5].
Chemistry 1. [5].	German 1 or 2. [5].
Physics 1. [5].	

Group B.—Commercial:

(Not more than **three** subjects to be elected. Those elected may include not more than **one** of the following: Bookkeeping 1, Typewriting 1, Stenography 1.)

Bookkeeping 1 or 2. [5].	Stenography 1 or 2. [5].
Typewriting 1 or 2. [5].	Office Practice 1. [5].

Group C. Technical:

(Not more than **two** subjects to be elected. **One** first unit may be elected, but not **two**.)

Woodwork 1 or 2. [8].	Arts and Crafts 1 or 2. [8].
Metal Work 1 or 2. [8].	Fabrics and Dress 1 or 2. [8].
Electricity 1 or 2. [8].	Home-making 1 or 2. [8].
Printing 1 or 2. [8].	

N.B.—For a shop course, the **eight** periods a week are distributed in the following manner:

Drawing and Design—2;

Theory—2;

Shop Practice—4. . .

For two shop courses, **fifteen** periods a week will be required, (not sixteen).

Group D.—General:

*Dramatics 2. [4].

*Home Economics 2. [4].

*Music 2. [4].

Commercial Law 1. [3].

Art 2. [4].

Sociology and Psychology 1.

General Mathematics 2. [5].

[3].

General Science 2. [5].

Physical Education 2. [2].

*General Shop 2. [4].

Vocations and Guidance. [1].

Any **two** subjects listed as General Electives for the First Year, and not previously taken.

*Special qualifications required of the teacher.

Directions re Second-Year Electives

1. All first units are prerequisites for the corresponding second units.

2. The first and second units of a subject may not both be taken during the same school year.

3. Not more than **three** subjects may be elected from Group A, and of those elected not more than **one** may be the first unit of a language.

4. Not more than **three** subjects may be elected from Group B; and those elected may include not more than **one** of the following: Bookkeeping 1, Typewriting 1, Stenography 1.

5. Not more than **two** subjects may be elected from Group C. **One** first unit may be elected, but **not two**.

6. Students who elect the second unit of a shop course from Group C shall not, during the same or a subsequent year, elect General Shop 2 or Home Economics 2 from Group D.

7. Of the subjects elected from Group D, as many as **two** may be General Electives for the First Year that have not previously been taken.

THE REQUIREMENTS FOR NORMAL ENTRANCE

(September, 1940).

N.B.—These requirements are subject to further revision.

1. English 1, 2 and 3.

2. Social Studies 1, 2 and 3.

3. Health and Physical Education 1.

4. Algebra 1.
5. Geometry 1.
6. Physics 1 or Chemistry 1.
7. Biology 1 or Biology 2.
8. Art 1.
9. Music 1.
10. Additional subjects chosen from the Group D Electives of the First Year, with General Mathematics 1 and General Science 1 excluded, sufficient in number to occupy at least seven (7) periods a week.
11. Additional subjects chosen from the Group D Electives of the Second Year, with General Mathematics 1 and General Science 1 excluded, sufficient in number to occupy at least ten (10) periods a week.
12. Additional subjects sufficient in number to complete a programme of thirty-five periods a week for three years.

THE REQUIREMENTS FOR MATRICULATION AT THE UNIVERSITY OF ALBERTA

(Common) Grade X	B.Sc. IN ARTS, OR GENERAL B.A.		B.A. (SPECIAL)		PROFESSIONAL FACULTIES (MEDICINE)	
	Grade XI	Grade XII	Grade XI	Grade XII	Grade XI	Grade XII
English 1—[5]	English 2—[5]	English 3—[5]	English 2—[5]	English 3—[5]	English 2—[5], or	Social Studies 2—[5], or English 2—[5]
Social Studies 1—[5]	Social Studies 2—[5]	Social Studies 3—[5], or a third Science	Social Studies 2—[5]	Social Studies 3—[5]	Social Studies 2—[5]	
Algebra 1—[5], or Geometry 1—[5]	Geometry 1—[5], or Algebra 1—[5]	Algebra 2—[5] Geometry 2 and Trigonometry—[5]	Geometry 1—[5], or Algebra 1—[5]	Three of the following: (1) Algebra 2—[5], (2) Geometry 2 and Trigonometry—[5] (3) Physics 2—[5], or (4) Biology 2—[5]	Geometry 1—[5], or Algebra 1—[5]	Algebra 2—[5] Geometry 2 and Trigonometry—[5]
Physics 1—[5], or Chemistry 1—[5]	Chemistry 1—[5], or Physics 1—[5]	Two of the following: (1) Physics 2—[5], (2) Chemistry 2—[5], (3) Biology 2—[5]	Chemistry 1—[5], or Physics 1—[5]		Chemistry 1—[5], or Physics 1—[5]	Physics 2—[5] Chemistry 2—[5]
Foreign Language 1—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]	Foreign Language 2—[5]	Foreign Language 3—[5]
Health and Physical Education—[3]			Second Language 1—[5]	Second Foreign Language 2—[5]	Second Foreign Language 1—[5]	Second Foreign Language 2—[5]
Required Subjects: 28	25	35	25	35	25	35
Electives: 7	10		10		10	

N.B.—It will not be possible to complete within three years of high school instruction the requirements for both Normal Entrance and University Matriculation.



**REGULATIONS FOR THE YEAR ENDING JUNE 30, 1939,
RELATING TO RECOMMENDATIONS FOR CREDIT IN FIRST-
YEAR AND SECOND-YEAR HIGH SCHOOL SUBJECTS
(GRADES X and XI).**

**No Departmental Examinations in Grade X or Grade XI
Subjects.**

1. In June, 1939, there will be no Departmental Examinations in Grade X or Grade XI subjects.

No Promotion Tests.

No promotion tests will be prepared or supplied by the Department for any of the Grade X or Grade XI subjects. Since it is the aim of the Department in abandoning Departmental examinations to give teachers more freedom to pursue the genuine values of the new programme unfettered by examination requirements, the Department expects that teachers will stress these values rather than preparation for final promotion tests.

Recommendations for Credit.

2. Superintendents of city schools and Principals of Schools may recommend for credit in any Grade X or Grade XI subject the students who have completed successfully the authorized course in that subject during the year 1938-39.

The number of credits carried by each of the subjects is shown on pages 9 and 11 above.

Maximum Number of Credits.

3. The maximum number of credits for which any student can be recommended is thirty-five (35).

**School Attendance or Correspondence Courses Are
Required for Credit.**

4. School attendance and classroom instruction are the vital factors determining credit. It will therefore be necessary for all students seeking credits to qualify for recommendation, either by taking classroom instruction during school hours as part of a regular school programme based on a definite time schedule, or by taking a correspondence course under the direction of the Department of Education.

- (i) The Department will expect that students recommended for credit have received instruction during an attendance of not less than 150 days.
- (ii) Students who enter a High School in January cannot be recommended in June for more than six-tenths of the maximum number of credits available to full-time students in that school.
- (iii) In all cases where students have attended less than 150 days, recommendations shall be supported by a statement



setting forth the grounds on which such recommendations may reasonably be accepted.

- (iv) Special cases of students presenting Medical Certificates or *bona fide* reports of other special circumstances, or of students changing schools during the school year, or of those repeating courses, will be dealt with on their merits by the Department.

Correspondence Students.

5. Students who enroll with the Registrar of the Department may take correspondence instruction under the direction of the Department, and on successful completion of the course in any Grade X or Grade XI subject be recommended by the correspondence instructor for credit in that subject. Further information may be had from the Registrar.

Private Students.

6.—

- (i) Private students seeking credit by recommendation in Grade X or Grade XI subjects will be required to qualify by taking correspondence courses under the direction of the Department of Education. See Section 5, above.
- (ii) Private students may write on the Departmental examinations of June, 1939, in Grade XII subjects, without having taken correspondence instruction in those subjects.
- (iii) Students receiving assistance at school after school hours will be considered as private students, and will be required to take correspondence courses.

Instruction Time

7. The amount of time available for classroom instruction determines the validity of recommendations for credit.

The number of credits carried by a subject is also the number of periods per week of instruction time that under standard conditions will be devoted to the subject.

“Instruction time” for any subject means time during which the teachers’ efforts are directed wholly and solely to the teaching of that subject.

Under standard conditions, one unit of credit requires one period of instruction of approximately thirty-five (35) minutes per week; and a subject carrying five credits will require at least 175 minutes of instruction per week.

Limitation of Credits in Small Schools.

8. Many of the smaller high schools are unable to satisfy the standard requirement with respect to instruction time.

For these schools, a reasonable requirement with respect to instruction time is 50% of the standard requirement. Recommen-

dation for credit in any subject will therefore be accepted by the Department from these schools if the amount of instruction time devoted to that subject is at least 50% of the standard requirement for the subject.

This "50% requirement" will be applied to different types of small schools in the following manner:—

(i) In High Schools where two or more teachers departmentalize the work of Grades X to XII (inclusive), or Grades IX to XII (inclusive), **the actual time for each subject will be not less than 50% of the standard requirement**; and these schools may offer instruction with recommendation to a maximum of 35 credits.

(ii) **High Schools in which one teacher is responsible for all the work of Grades X to XII are required to plan a four-year schedule for the work of Grades X to XII.** In these schools, the number of credits that Grade X students can secure will be less than 35, depending on the number of subjects taught. The general rule will apply, that the Department will accept recommendation to the maximum of 35 credits if the instruction time devoted to each of the subjects is at least 50% of the standard requirement. **A maximum of approximately 26 credits is advisable in schools of this type.**

(iii) In schools where the senior room provides instruction for grades below Grade IX along with instruction for Grade IX, and also for Grade X and higher grades, it will be difficult to maintain even 50% of the standard requirement in respect to instruction time. The programme in a school of this kind should be so arranged that the work of Grades X and XI can be covered in three years instead of two; **and under that arrangement 23 credits will be the maximum for reasonably efficient instruction.**

(iv) In one-room schools where the Inspector has authorized the work of Grade X in addition to that of the Intermediate and Elementary grades, it will be necessary in future to limit Grade X work to approximately a half-course; **that is, to 18 or 20 credits.**

Special consideration will be given by the Inspector to schools where the enrolment is small (not more than 15) and the number of grades is also small (not more than 5, including Grade X); **in which case the Inspector may authorize a larger number of credits.**

Acceptance of Recommendations Conditioned on Inspector's Approval of Organization

9. Early in September the Department of Education will send to every School in which Grade X or Grade XI subjects are taught a card form on which the Principal will be asked to specify the subjects taught in each of the Grades from VII to XII, and **to forward immediately the completed form to his Inspector for approval.**

If the Inspector approves the organization shown on the form, and the list of subjects as specified thereon, he will endorse his

approval, and return the form to the Examinations Branch of the Department of Education. If he does not so approve, he will notify the Principal or teacher concerned accordingly, requiring an adjustment of the teaching programme. After the adjustment has been made, the Inspector will endorse his approval on the amended form, and return the form to the Examinations Branch.

The Department of Education will not accept recommendations for Credit from schools offering instruction in Grade X or Grade XI subjects during the year ending June 30, 1939, unless the following requirements have been satisfied:

(i) The form described above has been returned to the Examinations Branch of the Department of Education bearing the Inspector's endorsement of approval.

(ii) The particular subject or subjects in which credit by recommendation is sought appear on the form bearing the Inspector's endorsement of approval.

Special Qualifications Required for the Teaching of Certain Electives

10. (i) With respect to each of the following electives, special qualifications are required of the teacher: Dramatics 1 and 2, Music 1 and 2, General Shop 1 and 2, Home Economics 1 and 2, Bookkeeping 1a, Typewriting 1a, Stenography 1a, and Mechanical Drawing.

(ii) With respect to each of the second units of these subjects, the minimum standard of qualification for teaching is the Permanent Junior Certificate.

(iii) Otherwise, the minimum standard of qualification for teaching is the Interim Junior Certificate.

For Mechanical Drawing, the qualification required is the same as that required for General Shop 1.

(iv) With respect to any subject for which the minimum standard of teaching qualification is the Junior Certificate, Interim or Permanent, the Department of Education may in any school require a higher standard of qualification on the recommendation of an Inspector of High Schools.

(v) On the recommendation of an Inspector of High Schools, the Department of Education may in any high school require that the teacher of Art 1 or 2, or of Physical Education 1 or 2, hold the *Junior Certificate in Art or in Physical Education*; but without such recommendation no such special certificate of qualification will be required.

(vi) The *Senior Certificate in Commercial Subjects* is the minimum standard of qualification required for teaching Bookkeeping 1 and 2, Typewriting 1 and 2, and Stenography 1 and 2. Instruction in these subjects may be offered only in schools where such instruction has been approved by the Department of Education.

(vii) *The Senior Certificate in General Shop or Shop Subjects* is the minimum standard of qualification for teaching the "Group C" Electives. Instruction in these subjects may be offered only in schools where such instruction has been approved by the Department of Education.

(viii) The Department of Education may grant, in any of the electives of the second-year or third-year high school programme, an *Interim or Permanent Junior or Senior Certificate* to a teacher who has submitted satisfactory evidence of adequate training and successful teaching experience.

(ix) A recommendation for credit in any of the subjects mentioned in the subsections (i) to (viii), preceding, will be accepted by the Department of Education only when the teacher offering the instruction on which the recommendation for credit is based holds the necessary Special Certificate, or other special qualifications approved by the Department, or by an Inspector of Schools or of High Schools.

(x) Further information regarding special certificates may be found in the pamphlet on "Teacher Certification" to be issued by the Department of Education.

Principal's Confidential Report Required for Recommendations.

Every recommendation for credit must be made by means of a **Confidential Report**, signed by the superintendent, principal or teacher making the recommendation. Full instructions regarding the form of the Confidential Report will be issued before the end of the school term.

Percentage Standing Required in Grade X Subjects.

(a) Confidential Reports in all subjects of Grade X will assign to each student a standing in each subject taken by that student, such standing to be indicated as a percentage to the nearest multiple of five.

(b) With respect to English 1, Social Studies 1, Algebra 1, Geometry 1, Physics 1, Chemistry 1, Latin 1, French 1, and German 1, a standing of 50% is required for Normal Entrance or Matriculation but a standing of 40% or more will entitle the student to credit towards the High School Diploma.

With respect to all other subjects, a standing of 50% will be required for credit.

(c) Students who fail to secure the required 50% standing in any of the foregoing subjects and who, nevertheless, desire credit in that subject for Normal Entrance or Matriculation must repeat the subject.

(d) In English 1 and Social Studies 1, a standing of not less than 40%, and in all other subjects a standing of not less than 50%, will entitle the student to proceed to the next higher unit of the subject; provided, however, that teachers are required to assign

such standing, 40% or 50% as the case may be, only if the attainment in the subject is such that the student can reasonably be expected to proceed with profit to the next higher unit of the subject.

(e) In Algebra 1 or Geometry 1, a standing of not less than 40% will entitle the student to proceed with General Mathematics 2; and in Physics 1 or Chemistry 1, a standing of not less than 40% will entitle the student to proceed with General Science 2.

(f) A student who obtained "Grade C" standing on the Grade IX examinations of 1937, and who is recommended for credit in General Mathematics 1 with a standing of not less than 50%, may take Algebra 1 or Geometry 1 in his second year; and such student who is recommended for credit in General Science 1, Biology 1 or Geology 1, with a standing of not less than 50% may take Physics 1 or Chemistry 1 in his second year. Otherwise such student may NOT begin Algebra 1, or Geometry 1, or Physics 1, or Chemistry 1 in his second year. He may begin a foreign language in his second year.

Number of Days Attendance.

The Confidential Report must indicate the number of days of attendance during which the student has taken instruction.

Copies of Recommendations to Be Retained.

Copies of all recommendations sent to the Department should be retained for the files of the school.

Statement of Credit.

(i) All recommendations shall be considered confidential, and shall not, therefore, be posted, or announced to students by Principals at the close of the school year. After all recommendations have been received, the Department will notify students of the results.

(ii) Students will be entitled to a statement from the Department of Education, to be issued during July or August, specifying the subjects in which they have been granted credit, and the total number of credits so granted.

Grade XI Credits

A further announcement regarding Grade XI credits will be made at some time during the school year.

OUTLINES OF COURSES, FOR THE FIRST AND SECOND
YEARS OF THE HIGH SCHOOL PROGRAMME (GRADES X
AND XI), WITH REQUIREMENTS AND PRESCRIPTION
OF TEXTBOOKS AND REFERENCE BOOKS
1938-39

ENGLISH

ENGLISH 1

Comprises Literature and Language.

Literature.

The following is the prescribed reading:

Poetry.

A Selection of English Poetry (Part I), Macdonald and Walker.

Drama.—One Play to be chosen from the following:

As You Like It: Shakespeare.

Midsummer Night's Dream: Shakespeare.

Silver Box: Galsworthy.

The Admirable Crichton: Barrie.

Free Reading.—Any six titles to be chosen from the following:

Book of Grey Owl.

Captains Courageous: Kipling.

Catriona (David Balfour): Stevenson.

Greenmantle: Buchan.

Ivanhoe: Scott.

Kenilworth: Scott.

Kidnapped: Stevenson.

King Solomon's Mines: Haggard.

Marco Polo's Travels.

Maria Chapdelaine: Hemon.

Mill on the Floss: Eliot.

Modern Short Stories: Selected by John Buchan.

My Life with the Eskimo: Stefansson.

My Man Jeeves: Wodehouse.

Scaramouche: Sabatini.

Seeds of the Mighty: Parker.

Shadows on the Rock: Cather.

Tale of Two Cities: Dickens.

The Talisman: Scott.

The Three Musketeers: Dumas.

The Virginian: Wister.

The White Company: Doyle.

Under the Greenwood Tree: Hardy.

We: Lindbergh.

A Friend of Caesar: Davis.

Beauty of the Purple: Davis.

Requirements.

It is the aim of the course that students acquire the habit of reading, and the ability to enjoy and appreciate good literature.

Students are required to do the reading prescribed. All of the selections in the book of poetry should be read, but not necessarily in class. The teacher and class may choose a number of selections for **intensive study**.

The play will be read in class.

Some time should be given to the study of rhythm in verse:

- (a) The foot of three syllables; dactylic and anapaestic.
- (b) Rhyme: beginning rhyme, end rhyme: (1) single, (2) double.
- (c) Special metres: blank verse, dactylic hexameter.
- (d) Scansion of easy blank verse and dactylic hexameter verse.

Passages for **memorization** (about 150 lines) are to be chosen by teacher and class in consultation.

The procedure for Free Reading will be informal. The reading should be done in free periods or in leisure time, but class discussions will be necessary, from time to time. Written reports are **not** required.

For **two** of the six titles to be chosen from the list of Free Reading, the teacher and class **may**, after consultation, substitute **two others** not on the list.

Copies of all the books for Free Reading should be placed in the classroom library.

See under "English 2" the reference to a special set of ten volumes for Free Reading.

N.B.—Students should not purchase their books for Free Reading until they have consulted with the teacher.

Language.

The authorized textbook is *Expressing Yourself*, Book II, for Grade X—Canadian Edition: Houghton, Mifflin & Company.

The teacher of English is no longer solely responsible for the work in *Oral and Written Language*. Every teacher is now a teacher of English, who will share with other teachers in the school the responsibility for correctness in the oral and written expression of the classroom. The teacher of English will expound the fundamental principles of grammar, composition and style; but all teachers will check the practical application of these principles in the students' classroom work.

The textbook is also a reference book, to which the student may be directed for help in correcting his language errors.

The classroom library should include one or more copies of a good compendium of language usage; such as the *Century Hand-*

book of Writing, or the *Handbook of Revision*, by Foerster and Steadman. Ward's *Grammar for Composition* will also be found useful.

The following check-list is to be used by all teachers of Grade X and XI subjects:

**Check-List for Oral and Written Language
(Grades X and XI).**

1. Penmanship, arrangement, and general appearance of all written work.
2. Spelling (including the apostrophe).
3. Capitalization. (See *Grammar for Composition*: Ward.)
4. Punctuation:
 - (1) Period and Question Mark.
 - (2) Comma:
 - (a) To separate words and phrases in a series.
 - (b) To mark off interruptions or parenthetical expressions.
 - (c) To mark off a phrase or clause at the beginning of a sentence (unless the sentence is short and the meaning clear without the comma).
 - (d) To mark off non-restrictive clauses.
 - (e) To separate words that might erroneously be read together.
 - (3) Semi-colon:

To separate clauses in a compound or compound-complex sentence where the conjunction is omitted.
 - (4) Colon:
 - (a) To follow a general statement preceding specific examples.
 - (b) Before a long quotation.
5. Language:
 - (1) Pronoun:
 - (a) Correct case forms of pronouns.
 - (b) Agreement of pronoun with antecedent.
 - (2) Distinction between adjective and adverb.
 - (3) Verbs:
 - (a) Use of the correct forms of the verbs listed below, with emphasis on the auxiliary with the past participle: lie, lay, spring, swim, write, take, speak, sing, see, run, go, give, drink, do, come, begin.
 - (b) Agreement of verb with subject.

Example: Incorrect—He don't want to go.
Correct—He doesn't want to go.

- (c) Use of subjunctive in conditions contrary to fact.

Example: Incorrect—If I was you I'd go.

Correct—If I were you I should go.

- (d) Use of perfect tenses:

Example: Incorrect—He said he never saw a better game.

Correct—He said he had never seen a better game.

- (4) Some common errors to avoid:

- (a) The use of *different than* for *different from*.
- (b) *These* and *those* kind for *this* and *that* kind.
- (c) *Had ought* for *ought*.
- (d) *Couldn't hardly* for *could hardly*.
- (e) The preposition *like* for the conjunction *as*.
- (f) The adjective *real* for the adverb *very*.

6. Sentence Structure:

- (1) Cultivate—

- (a) The use of simple and complex sentences in place of the over-popular compound sentence.
- (b) The use of parallel structure.

- (2) Avoid—

- (a) Indefinite reference of pronouns.
- (b) Unrelated modifiers: dangling participle or gerund.
- (c) Misplaced modifiers. (He only has two wrong.)
- (d) Unnecessary change in grammatical construction.

7. In all oral work pay special attention to enunciation, pronunciation, and audibility.

Practice Books or Work-Books in Language.

Some of the following may be useful to the teacher:

Practice Book in English—Book 2 (Grade X) and Book 3 (Grade XI): Houghton, Mifflin Co.

(For use with *Expressing Yourself*.)

High School English Practice Books, 1 and 2, by Canby, Opdycke and Gillum: Macmillan Co.

English in Action Practice Book, by Tressler: Heath & Co. (Copp Clark).

The M. O. S. Book, by Ward—Book 1 (Grammar); Book 2 (Punctuation); Book 3 (Sentence): Scott, Foresman Co. (W. J. Gage).

Practical Exercises in the Mechanics of Written English for High Schools, by M. H. Willing: Teachers College Bureau of Publications, New York.



**Reference Books in Language for the Use of Students—
Grades X and XI.**

A Handbook of Revision, by Foerster and Steadman: Houghton, Mifflin Co.
Grammar for Composition, by Ward: Scott, Foresman Co. (W. J. Gage).
Century Handbook of Writing.

**Reference Books in Language for the Use of Teachers—
Grades X and XI.**

English in Action for High Schools, Books II and III—Tressler: Heath & Co. (Copp Clark).
Dominion High School English (Grade X)—Canby, Opdycke and Gillum: Macmillan Co.
High School English, Book III (Grade XI)—Canby, Opdycke and Gillum: Macmillan Co.
Ontario High School Grammar—Stevenson and Kerfoot.
Modern English Writing—Douglas Bement: Farrar and Rhinehart.
Dictionary of Modern English Usage—Fowler: Oxford Press.

ENGLISH 2.

LITERATURE.

The following is the prescribed reading:

Poetry.

Anthology of Poetry: W. J. Alexander.

Essays.

Essays of Yesterday and Today: Tinker.

Short Stories.

Selected Short Stories (Ryerson Press).

Drama.—At least one Play to be chosen from the following:

Abraham Lincoln: Drinkwater.
Julius Caesar: Shakespeare.
Milestones: Bennett and Knockblock (A Play in 3 Acts).
Richard of Bordeaux: Daviot.
St. Joan: Bernard Shaw.
The Tempest: Shakespeare.
Julius Caesar—Elizabeth the Queen: H. E. Harding.

Free Reading. Any Six Titles to be chosen from the following list.

Stories and Novels:

Adam Bede: Eliot.
Almayer's Folly: Conrad.
David Copperfield: Dickens.
Hangman's House: Donn Byrne.
Kim: Kipling.
Lorna Doone: Blackmore.
North to the Orient: Anne Lindbergh.

Old St. Paul's: Ainsworth.
Oliver Twist: Dickens.
Quo Vadis: Sienkiewicz.
Richard Yea and Nay: Hewlett.
Royal Flush: Margaret Irwin.
So Big: Ferber.
Summer Lightning: Wodehouse.
The Crisis: Churchill.
The Good Companions: Priestley.
The Little Minister: Barrie.
The Master of Ballantrae: Stevenson.
The Surgeon's Log: Abraham.
The Time Machine and the Wheels of Chance: Wells.
Typhoon: Conrad.
Vanity Fair: Thackeray.
Youth and Gaspar Ruiz: Conrad.

Plays.

Disraeli: Parker.
Justice: Galsworthy.
Richard II: Shakespeare.

Biography.

Disraeli: Maurois.
Up the Years from Bloomsbury: Arliss.

Science.

Tarka, the Otter: Williamson.
The Chemical History of a Candle: Faraday.

Special Set of Books for Free Reading in Small Schools.

Students in small schools may choose their six books for Free Reading from the following set of ten volumes, instead of choosing from the list given above:

Everyman's Library:

A Shepherd's Life: Hudson.
Three Musqueteers: Dumas.
Tales of Detection: Dorothy Sayers.
The Time Machine and The Wheels of Chance: H. G. Wells.
Stories, Essays and Poems: Walter de la Mare.
The Master of Ballantrae: Stevenson.
Eothen: Kingslake.

Kings' Treasures Series:

Bligh of The Bounty.
Youth and Gaspar Ruiz: Conrad.
Chemical History of a Candle: Faraday.

This set will make a good classroom library for Free Reading in small schools. Other volumes may be added each year.

The set may be had from the School-Book Branch at the special price of \$4.50.

Requirements.

The requirements described for the **Literature of English 1** apply here with the necessary changes. The aims and procedures of the two courses are the same.

About 150 lines of poetry and drama should be selected for *memorization*.

Language.

The authorized textbook is *Expressing Yourself*, Book III for Grade XI—Canadian Edition: Houghton, Mifflin & Company.

The procedure for Grade XI *Language* is the same as that described for Grade X, including the use of the Check-List, and of reference books.

Reference Books for Students and Teachers.

See the lists given under Grade X *Language*.

SOCIAL STUDIES

INTRODUCTION.

The social, economic and political changes through which we are passing offer a challenge to Education, and more especially to Social Studies. The new courses have been planned to give the student an opportunity to realize the following outcomes:

1. To interest himself in the story of civilization and to discover how different peoples tried to solve problems such as we have to meet. He should compare textbooks, and should be encouraged to read fiction and current literature bearing on a period that interests him.

2. To relate his findings to present-day problems with a view to discovering how we may cope with these problems.

3. To appreciate the fact that many widely different economic and political methods have been and are being tried in different parts of the world; and to make honest appraisal of each of these systems.

4. To estimate the price in human intelligence and human leadership necessary to make desired changes in a democratic way; and to realize that he must prepare to undertake his share of responsibility.

5. To get some experience in democratic leadership and co-operation so that he may adequately discharge his social responsibilities in later life.

GENERAL REMARKS ON PROCEDURES.

Procedures should be selected that will further to the utmost the student's capacity for constructive thinking. Conclusions should be reached by his own thought processes so that they become his own mental property. He should seek his evidence, weigh it, organize it, present it and defend it.

Care should be taken in the selection of the main theme to be followed in each section of the work in order that all the pertinent facts may be correlated with it. The theme should be developed by a cooperative effort. Its presentation may take various forms, such as panel and forum discussions, debates, individual and class reports. The developing of skills in the use of collecting and evaluating evidence from various reference sources should be regarded as a worthwhile training.

The constructing of time charts and the use of maps and illustrated material are valuable for comparative purposes. Where the classes are large and there are duplicating facilities, the prep-



aration of individual guide sheets giving the different references has been found helpful.

SOCIAL STUDIES 1.

Social Studies for Grade X surveys briefly the story of man from the earliest times down to 1500. It includes not only the political history of the important peoples, but their social, economic, and moral history as well. It includes, further, the facts and influences of geography essential to the understanding of history.

An understanding of the fundamental principles is a primary objective; it is the lessons of history, not merely the facts, that are to be learned. Historical and social principles of importance may be observed in the past, where they are free of current prejudices. Early history is a background for an understanding of the present. In fact, many institutions of to-day cannot be understood without a knowledge of early, and especially medieval, history. Possession of the facts about the origins and movements of peoples, together with their contributions to human knowledge, should help to dissipate current false ideas about races. The slowness with which our present civilization has been built up, and our great debt to past generations should be realized. Last, the study of early history is extremely interesting; the teacher may measure his success by the enthusiasm he arouses.

The study of current events is part of the work to be covered. Wherever possible the history of the past should be related to the world of to-day. This need not cause a straining of facts. It is not possible to read all the problems of to-day in terms of Ancient Egypt. Other current events of interest should be discussed even if they have no bearing on early history. Perhaps it is better that there should be no set period for current events. The time allowed should be variable; some days may offer little of interest, while others may have much for interesting and valuable discussion. The topics may be suggested by the instructor, but it is better if the pupils are trained to bring up the topics themselves. This is easily brought about by a few suggestions early in the year.

Since important facts must be retained, testing is essential. Testing should be designed, however, to stimulate interest and not to kill it. No useful purpose is gained in forcing students to memorize unimportant facts by giving them the kind of test that requires it.

If interest can be maintained and a eager spirit of inquiry built up, success has been achieved.

SUGGESTED PROCEDURES.

1. The printed outline of the course should be made available for all students. Encourage them to consult it.
2. Lecture and explanation will be required from the teacher; but the students should have every opportunity to discover for themselves, and to express themselves. Class discussions, properly



regulated, should be employed extensively. The emphasis should be on practice in interpreting and understanding facts, and not merely on collecting and memorizing them. However, the facts, and enough of them, must be obtained before they can be interpreted.

3. The class should be organized with chairman and secretary. Have new officers twice a month so that all members get practice. The secretary keeps a record of committees, their duties, books loaned, and progress from day to day.

4. Major and required themes (e.g., No. 1 and No. 7) should be worked on by all members of the class. The work should be planned as a whole; and the task of getting the necessary information on different parts of the theme should be divided amongst committees of the class.

5. Work may be done on two or more optional themes at the same time, different sections of the class electing different themes according to interest, and each section planning and sharing its own work. The report on each theme can be made to the whole class, and be followed by questions and class discussion.

6. Current magazines and newspapers should be read during the year in terms of Social Studies. Students should scan all papers and magazines for maps, clippings and cartoons. These may be posted on the bulletin board, and then filed for use in the library. Scrapbooks and cartoon histories will also be of value.

7. Each student should make a time chart on which to record all important items. Constant reference to the chart helps the student to get a time sense without a conscious memorization of dates.

8. It is advisable to have the students occasionally spend about thirty minutes in writing on a topic that has been assigned in advance, so that subject-matter may be organized for it. (Urge care in language, composition and form.)

Use of Textbooks and Reference Books.

Three text-books are recommended for use. While no pupil need, nor should, own all three, **every pupil should have at least one**. The teacher should try to arrange for an equal distribution of the three textbooks in the class. Two lists of reference books are given. The school library should possess at least one copy of each on the primary list, and more if possible. As many as can be afforded from the secondary list should be obtained; they are all valuable.

Pupils and teachers should not confine themselves to the authorized list. Encyclopaedias and reference books are to be found in private homes as well as in civic libraries. Magazines and newspapers frequently provide excellent material. For example, the *Illustrated London News* publishes accounts of the excavation of ancient cities; the accompanying pictures are worthy of careful attention. *The National Geographic Magazine* gives accounts of primitive people living in our own time. In every community,

citizens with special knowledge on parts of the work are to be found; clergymen, lawyers, physicians, and others may well be invited into the class-room. One warning: all outside sources of information should be checked for reliability—for not every reference book is to be depended on.

For Current Events:

Scholastic: American High School Weekly, Scholastic Chamber of Commerce Bldg., Pittsburgh, Pa. (\$1 per year—weekly.)

World Affairs: 224 Bloor St. W., Toronto, Ont. (\$1 per year—monthly.)

LIST OF BOOKS.

TEXT-BOOKS:—No pupil is expected to buy all three.

1. West: *Early Peoples*; or
West and Eastman: *Modern Progress* (preferable).
2. DeWitt: *A Brief World History*.
3. Tenen: *The Ancient World*.

PRIMARY REFERENCES:—The school library should have at least one copy of each.

Breasted: *Ancient Times*.

Cary: *History of Rome*.

Collins: *History of Medieval Civilization*.

A. S. Peake: *Origins of Agriculture*.

Quennell: *Everyday Life in Prehistoric Times*.

GENERAL REFERENCE LIST:—School libraries.

Wells: *Outline of History*.

Atlas of Ancient and Classical Geography.

A Smaller Classical Dictionary.

Rose: *The Mediterranean in the Ancient World*.

Phillips: *Rome and the Middle Ages*.

Elson: *Modern Times and the Living Past*.

Weech: *World History*.

Pahlow: *Man's Achievement to the Age of Steam*.

Seary and Paterson: *Story of Civilization*.

Showerman: *Rome and the Romans*.

Elliot: *Teachers' Book of Social History*.

McKinley-Howland-Dann: *World History in the Making*.

Rouse: *Stories of the Old Greeks*.

Power: *Cities and Their Stories*.

Archer: *Stories of Exploration and Discovery*.

Douglas-Smith: *The World of the Ancients*.

Priestley: *Beginners' Ancient History*.

HISTORICAL NOVELS help to give reality to the facts of history; particularly recommended are those of W. S. Davis. The following titles are valuable for this course:



The Victor of Salamis; A Friend of Caësar; God Wills It; The Beauty of the Purple; The Friar of Wittenberg; A Day in Athens; A Day in Old Rome; Life on a Medieval Barony.

OUTLINE OF COURSE

Social Studies comprises *seven themes*, or topics. FIVE of these, together with *Current Events*, constitute the minimum work for a year. Themes 1 and 7 are obligatory every year; Theme 2 is obligatory for 1938-39 and every second year thereafter; while Theme 3 is obligatory in the alternate years. Two optional themes complete the minimum requirements.

N.B.—Theme 1 must be completed before Christmas. Classes that spend a longer time on this theme will not be able to complete satisfactorily the remaining part of the course.

Teachers are requested not to leave the optional themes for the end of the year, but to complete the course with one of the obligatory themes. The following order of themes is recommended for 1938-39: Theme 1; one optional theme; Theme 2; a second optional theme; Theme 7.

In order that the two years' course in Social Studies 1 and 2 may be well-balanced, the optional themes of Social Studies 1 (Numbers 4, 5 and 6) should be "staggered" with the corresponding optional themes of Social Studies 2 (Numbers 5, 6 and 7) in such a way that classes will not have, in Social Studies 2, the same optional themes that were chosen for Social Studies 1.

The references given in the outline are not necessarily exhaustive, nor is it necessary that all should be used.

THEME 1.—THE FAMOUS STATES OF HISTORY.

(Obligatory).

N.B.—This theme must be completed before Christmas. Classes that spend a longer time on this theme will not be able to complete satisfactorily the remaining part of the course.

Minimum Requirements:

(a) Knowledge of the origin and rise of each state; with the why and how in each instance.

(b) Knowledge, in each state, of the form of government;—in simple forms, avoiding technical language and fine distinctions.

(c) The effect of geographic and economic conditions on each state or civilization.

(d) The idea that generally a form of government is developed to meet the particular needs of the time and country. A form that was almost perfect once may be useless today. A form that is well adapted to one nation may be totally inadequate for another.

(e) A brief study of each culture in comparison with the others.



(f) An idea of time and the position of each state in time. This should be established by drill methods, using time charts and other devices.

(g) Continual comparison and contrast of ancient and medieval stages with those of to-day.

(h) An effort to guide students into thinking in terms of the people and age studied. They should realize that conditions and ideas of to-day differ from those of earlier times in many important respects. They should also realize that in other respects man has changed little, or not at all.

(1) The contributions of each state or culture.

1. Prehistoric peoples; a general survey; their position in time; old Stone Age; new Stone Age; material development; social and tribal organization; comparison with Stone Age men of later times—such as the Indians of North America. All texts, Ch. 1; DeWitt, Ch. 2 (American Indians); Breasted, Chs. 1-2.
2. Egypt; origin of a unified state; influence of geography on Egypt, especially with respect to food supply, government, and defence; form of government. West and Eastman, Ch. 2; DeWitt, Ch. 6; Tenen, Ch. 3; Breasted, Chs. 3-4.
3. The Empires of the Fertile Crescent; geographical facts and their relation to the histories of the various empires; walled cities; Babylonians and Hammurabi; Assyrians with their militarism and imperialism; Persians—government and roads. West and Eastman, Chs. 3-5; DeWitt, Ch. 5; Tenen, Ch. 2; Breasted, Chs. 5-6-8.
4. The Cretans; a maritime state; effects of sea-power; culture. DeWitt, Ch. 8; West and Eastman, Ch. 6; Breasted, Ch. 9.
5. The Phoenicians; mountains and timber made them seafarers; Tyre; Carthage; voyages to the tin islands. DeWitt, pages 85-88; West and Eastman, pages 54-56; Breasted, Ch. 10.
6. The Hebrews; conditions of soil and rainfall made them a pastoral people; organization and government characteristic of pastoral peoples; relations to neighboring peoples; judges; kings; division into two states; captivity and dispersal. DeWitt, pages 56-58; West and Eastman, pages 56-60; Tenen, pages 81-86; Breasted, Ch. 7; *The Old Testament* should be used as a text.
7. The Greeks; the mountains caused division and reduced farm land; good harbours; need for trade abroad; city states—Athens, Sparta, Thebes; evolution of democracy in Athens; Persian Wars; Philip of Macedon; Alexander the Great.



- DeWitt, Chs. 9-11; West and Eastman, Chs. 6-13; Tenen, Ch. 5; Breasted, Chs. 9-18.
8. Hellenistic civilization; effects of Alexander's conquests; new states; mixture of races and cultures; resultant civilization. DeWitt, Ch. 12; West and Eastman, Chs. 14-15; Breasted, Chs. 19-21.
 9. The Roman Republic; early political struggles; expulsion of kings; two consuls; tribunes; the Senate; the Gracchi; Julius Caesar. DeWitt, Chs. 13-15; West and Eastman, Chs. 16-22; Tenen, Ch. 6; Breasted, Chs. 22-26; Cary, General reference.
 10. The Roman Empire; form of government—dictatorship in democratic forms; famous emperors; the growth of bureaucracy; division into two Empires; causes of decline. DeWitt, Chs. 16-17; West and Eastman, Chs. 23-27; Tenen, Ch. 7; Breasted, Chs. 27-29; Cary, General reference; Collins, Chs. 1-2.
 11. The barbarians; origin; characteristics; organization; the various nations; places of settlement, tracing their names on the map of Europe to-day; the new nations; Charlemagne. DeWitt, Chs. 22-23; West and Eastman, Ch. 28; Collins, Ch. 4.
 12. Feudal Europe; reasons for origin of feudalism; description in full. DeWitt, pages 252-254; West and Eastman, Ch. 30; Collins, Ch. 11.
 13. City republics of the Middle Ages; Italy; Low Countries; Germany; examination of reasons for their rise; democracy; guilds. West and Eastman, pages 330-334; Collins, Ch. 20.
 14. The Papacy; political importance; survival of the Imperial idea; unity of Christendom; influence on Europe; Crusades. West and Eastman, pages 282-288; Collins, pages 103-109; Chs. 13, 15, 16, 22, 29.
 15. The Arabian Empire; Mohammed; spread of Arab power; the caliphs; culture; Turks; clash with Christianity; Islam to-day. West and Eastman, pages 282-284, 326; DeWitt, pages 265-270; Collins, Ch. 8.
 16. The rise of national states; Spain; France; England; growth of national feeling. DeWitt, Ch. 33; West and Eastman, Chs. 32-33; Collins, Chs. 17-19.
 17. India; a brief consideration. DeWitt, pages 190-201; 299-308.
 18. China; a brief consideration. DeWitt, pages 202-217; 309-325.
 19. Civilizations of South America. DeWitt, pages 25-26.

THEME 2.—TRADE AND INDUSTRY.

(Obligatory in 1938-39).

General Considerations:

- (a) The advantages gained through trading.
- (b) Specialization and division of labour.
- (c) The importance of transportation.
- (d) The media of exchange.

1. The Hunting Stage:—man's early dependence on chance food supply; invention of weapons; hunting and fishing; discovery of uses, and control, of fire; cooked food; periodic scarcity of game led to migrations and famine; dwelling places; clothing.

DeWitt, Ch. 1; Tenen, Ch. 1; West and Eastman, Ch. 1; Breasted, Chs. 1-2; Quennell, *Everyday Life in Prehistoric Times*; Wells, Chs. 8-14.

2. The Pastoral Stage:—domestication of animals made food supply more certain; animals domesticated; nomadic life; tent-dwellers; clothing; religion; tribal organization; tribal wars for pasturage and wells; story of Abraham; more extensive diet.

References as above; *Old Testament* accounts of nomadic life.

3. The Agricultural Stage:—origin of agriculture; women probably the first farmers; early cereals; fixed dwellings; pottery; metal work; property in land; larger political organizations; change in diet; slave labor.

4. Earliest Agricultural Civilizations:—water supply and climate; irrigation in Mesopotamia and Egypt; material civilization based on plentiful food supply; houses; materials for clothing.

DeWitt, Chs. 4-6; Tenen, Ch. 2; West and Eastman, Chs. 2-3; Breasted, Chs. 3-8; Wells, Ch. 16.

5. Primitive peoples:—origin of industries; earliest man a "jack of all trades"; earliest industries; articles of trade; exchange by barter, theft, or war.

Tenen, Ch. 1; West and Eastman, Ch. 1; DeWitt, Chs. 1-4; Breasted, Chs. 1-2, pages, 299-308; Quennell, *Everyday Life in Prehistoric Times*; Wells, Chs. 9-11, 15, 17, 20.

6. Development of Trade and Industry in Early Civilizations:—discovery of metals—copper, silver, gold, iron; use of fire; the smith—the most important artisan; spinning and weaving; pottery; early trade in manufactured articles—pottery, weapons, utensils, articles of adornment; metals as media of exchange; coins; traders in money. Means of transport; pack animals; boats and ships; water routes; rise of cities as centres of industry.

7. Trade and Industry in Egypt:—influence of the Nile; various industries; the potter's wheel; skill of workers; articles of export; spread of Egyptian civilization through trade.
Tenen, Ch. 2; West and Eastman, Ch. 2; DeWitt, Chs. 6-7; Breasted, Chs. 3-4; Wells, Ch. 16.
8. Trade and Industry in Mesopotamia:—industries; trade routes; trade wars; favorable location for trade.
Tenen, Ch. 2; Breasted, Chs. 5-6, 8; DeWitt, Ch. 5; Wells, Ch. 16; West and Eastman, Chs. 3-4.
9. Trade of Phoenicians and Cretans:—Phoenician craftsmen, traders, ship-builders; Tyrian purple; voyages of discovery; colonies; the Cretan Empire; legend of Minos; pottery and metal work; highly developed art; navy; trade relations.
Tenen, Chs. 2, 4; DeWitt, Ch. 8; West and Eastman, Chs. 5-6; Wells, Ch. 16.
10. Trade and Industry in Greece:—industrial knowledge from Asia; lack of materials in Greece; expansion in search of raw materials and markets; colonies; shipping trade; exports and imports; trade routes; extent of trade; organization of industry; decline of household industries; predominance of small work-shops; division of labor; slave labor and free labor; banking; money-lending; letters of credit; local markets; wholesale merchants; rise of commercial law; effect of wars on economic life of the Greeks.
Tenen, Ch. 5; West and Eastman, Chs. 6-13; DeWitt, Chs. 9-11; Breasted, Chs. 9-17.
11. Greece and Rome:—scientific farming among the Greeks; writers on agriculture; large scale farming among the Romans; horticulture; fruits; vegetables; olives; grapes; diet; use of slave labor.
DeWitt, Chs. 9-16; Breasted, Chs. 9-30; Collins, Chs. 1-2; Tenen, Chs. 5-6; West and Eastman, Chs. 6-22.
12. Trade and industry in the Hellenistic and Roman Periods:—Alexander's conquests spread Greek civilization; hoards of gold captured in Persia put into circulation—effect on prices and business prosperity; new cities; city life; extensive foreign trade; expansion of industry in the Hellenistic period; Roman unification of the Mediterranean brought peace and prosperity; Roman law and its effect on trade; Roman highways: suppression of piracy; banking and coinage; effects of currency depreciation; organization of industry in the Roman world; small work-shops at first; later development of large-scale industry; labor, guilds; capitalism; development of corporations; position of the state in trade and industry; economic decline in the 3rd, 4th, and fifth centuries.
Tenen, Chs. 6-7; DeWitt, Chs. 12-20; West and Eastman, Chs. 15-27; Collins, Chs. 1-2; Wells, Chs. 27-29; Breasted, Chs. 19-30.

13. Trade and Industry in the Middle Ages:—relative unimportance of trade in the 8th, 9th, and 10th centuries; barbarian invasions; Mohammedan control of the western Mediterranean; industry confined to the manors; trade revival in the 11th and 12th centuries, with reasons; Crusades, growth of cities; organization of trade; the merchant gild; the law merchant; fairs; local markets; commodities exchanged; trade with the Far East; hazards of trade; trade routes; organization of industry; craft gilds and their monopoly powers; industry in small work-shops; money-lending; banking; fair-letters; letters of credit; maritime insurance; Italian bankers; rise of capitalism.

DeWitt, Chs. 17-30; West and Eastman, Chs. 19-24; Collins, Chs. 7, 19, 20, 21; Wells, Chs. 32-35.

14. Medieval Agriculture:—manorial system; the lord; manor house; serfs; the open field system; duties of the serf; lord's monopolies; backwardness of agriculture; crude implements; inferior stock; crop failures and famine; rise of towns; revival of trade and money economy, and their effect on agriculture; emancipation of serfs; the gilds; decline of manorial system.

DeWitt, Ch. 27; West and Eastman, Ch. 30; Collins, Chs. 12, 35.

THEME 3.—THE GROWTH OF HUMAN KNOWLEDGE.

(Required in 1939-40).

Attention should be directed to the following:—

- (a) The slowness with which knowledge has been accumulated.
- (b) The debt which man to-day owes to past generations.
- (c) The methods by which knowledge is preserved and disseminated: writing, writing tools, writing materials.

1. Prehistoric Man:—curiosity about his environment; tools; fire; writing; the beginning of history.

DeWitt, pages 10-12; Ch. 2; West and Eastman, pages 8-9; Tenen, Ch. 1; Quennell, *Everyday Life in Prehistoric Times*; Breasted, Chs. 1-2.

2. The Egyptians:—astronomy; astrology; geometry; need for this knowledge.

DeWitt, pages 71-73; West and Eastman, pages 24-25; Tenen, pages 31, 33; Breasted, Chs. 3-4.

3. Mesopotamia:—astronomy and astrology; schools; note lack of contributions by military nations.

DeWitt, page 47; West and Eastman, pages 42-44; Tenen, pages 43-45, 48; Breasted, Chs. 5-6, 8.

4. The great Greek thinkers, and their ideas:—Socrates' method of teaching; Plato's idea of the perfect state; Aristotle's organization of knowledge; the Stoics; the



Epicureans; failure to use methods of observation and experiment.

West and Eastman, pages 85, 97-98, 125-130; DeWitt, page 123; Tenen, pages 168-177; Breasted, Ch. 15.

5. The Hellenistic thinkers:—
West and Eastman, pages 157-162; Tenen, page 175; Breasted, Ch. 21.
6. The Romans:—how Rome drew on the knowledge of other peoples; Roman schools; Rome's contribution to the spread of knowledge.
West and Eastman, page 253; Cary, pages 271-272, 467-468, 696-698; Collins, pages 20-26, 47, 49.
7. The Chinese:—scholars regarded as highest class in society.
DeWitt, page 37.
8. Europe in the Middle Ages:—influence of Aristotle; the Schoolmen; theology; law; medicine; Thomas Aquinas; Roger Bacon.
DeWitt, page 374; West and Eastman, pages 335-338; Collins, Chs. 24-25.
9. The Arabs:—medicine; mathematics; paper.
DeWitt, page 375; West and Eastman, page 326; Collins, Chs. 8, 19, pages 552, 771-773.
10. The Byzantines:—
West and Eastman; Collins, Ch. 7, pages 402-404.
11. The Modern Age:—gunpowder; paper; printing from movable type; discoveries.
West and Eastman, Ch. 34; Collins, Ch. 35.

THEME 4.—EXPRESSION, AND AESTHETICS (Optional).

The various methods by which man expresses himself are to be studied in this topic. These include speech and oratory, literature, music, painting, sculpture, dancing, the drama, and industrial art. The detail with which these are studied should depend on the interests of the pupils and the material available. *Pupils interested in the theatre may be interested in compiling an outline of the development of the drama.*

The following aspects of this theme should be brought out:

- (a) Man's need of expressing his thoughts and emotions.
 - (b) Man's striving for aesthetic expression.
 - (c) The value and importance of art in life.
1. Prehistoric Man:—speech; art—its relation to magic; decoration of pottery and weapons; writing for communication; writing for the preservation of ideas and the beginning of history.
West and Eastman, Ch. 1; Tenen, pages 10-11; Breasted, Chs. 1-2; Quennell, *Everyday Life in Prehistoric Times*.



2. The Egyptians:—architecture; painting; sculpture; various kinds and methods of writing; literature.
DeWitt, pages 75-79; West and Eastman, pages 21-24, 27; Tenen, pages 33, 77-79; Breasted, Chs. 3-4.
3. The Fertile Crescent:—architecture and materials of construction; writing; literature.
West and Eastman, pages 42-43, 45-46; Tenen, pages 42-45; Breasted, Chs. 5-6, 8.
4. The Greeks:—greatest artistic geniuses of antiquity; decoration of pottery; painting; sculpture; oratory; the dance; the drama; literature; architecture.
DeWitt, pages 116-118, 120-122; West and Eastman, pages 79, 82-85, 119-130; Tenen, pages 130, 153-164, 178-186; Breasted, Chs. 10, 15, 18. *Note pictures in all texts.*
5. The Romans:—architecture; the drama; literature.
DeWitt, pages 166-169; West and Eastman, pages 249-256; Breasted, Chs. 27-29; Cary, numerous references, pictures.
6. Byzantine:—art; mosaics, architecture.
DeWitt, pages 355-357; Collins, pages 157-158, 403-404.
7. Medieval Art in Europe:—architecture of churches, castles, and palaces; painting and its relation to the church; sculpture, literature.
DeWitt, pages 344-355; West and Eastman, page 338, many illustrations; Collins, Chs. 26-27.
8. India:—architecture; literature.
Encyclopaedia Britannica.
9. China:—literature.
DeWitt, pages 313 and 317.
10. American Art:—Aztec art; artistic expression among the North American Indians, their decoration of their persons and their weapons; folklore of the Indians.
DeWitt, Ch. 2.

THEME 5.—RELIGIONS (Optional).

The growth and refinements of religious ideas from the primitive beliefs of early man to the ethical religions of to-day. The following aspects of the topic should be examined:

- (a) The founders, and origin, of each religious system.
- (b) The influence of geographic environment on each.
- (c) The relation of religious beliefs to art, music, poetry, and architecture.
- (d) The relation of morality to religion.
- (e) Elements of cruelty, severity, and sacrifice in early religions.
- (f) The effects of persecution.

The result should be:

- (a) A knowledge of the history of Christianity.
 - (b) A brief acquaintance with other important religions.
 - (c) A genuine respect for, and toleration of, the religious beliefs of other people.
1. The Religion of Primitive Man:—his fear of nature; belief in magic; ideas of morality; taboos; beliefs of primitive peoples existing in modern times.
DeWitt, pages 28-29, 42-43; West and Eastman, page 3; Tenen, pages 11, 18-20; Breasted, page 21.
 2. The Religion of Egypt:—the gods and their relation to life, spring, fertility, and harvests; idea of a sun-god, an approach to monotheism; temples.
DeWitt, page 67; West and Eastman, pages 27-30; Tenen, pages 65, 77; Breasted, pages 70-71, 114-117.
 3. The religion of Babylon:—
West and Eastman, page 47; Tenen, pages 43, 47; *Old Testament*; Milton, *Paradise Lost*, Book 2; Breasted, pages 149-150, 174-175, 191.
 4. Zoroastrianism:—relation to morality; good and evil.
West and Eastman, pages 52-53; Tenen, page 106; Breasted, pages 259-260.
 5. The Religion of the Phoenicians (Philistines):—
Old Testament.
 6. The Religion of the Hebrews:—belief in one God; literature; Solomon's Temple.
The Old Testament; DeWitt, pages 56, 58; West and Eastman, page 60; Tenen, page 97; Breasted, Ch. 7.
 7. The Religious Ideas of the Greeks:—the Olympian Gods, and their relation to daily life, as, Demeter for the harvest; Olympic Games; ideas of morality; Stoics; Epicureans; relation of geography to lack of superstition; temples; idea of future life.
West and Eastman, pages 74-76, 96-97, 130; DeWitt, page 132; Tenen, pages 165-168; Breasted, pages 336-340, 476-478.
 8. Buddhism and Hinduism: caste system.
DeWitt, pages 193-194, 200, 216-217.
 9. Confucianism and Taoism:—
DeWitt, pages 208-211.
 10. The religions of Rome:—the gods of the state; the gods of the household; tolerance of foreign gods; ideas of morality.
West and Eastman, pages 204-212, 75; Collins, pages 23-24, 45-46, 48-50; Cary, 273-275, 468-469, 587-590, 696-698.
 11. Christianity:—origin; missionaries; Christianity in Rome; rise of the Papacy; monasticism; Crusades; morality.

DeWitt, pages 185-189, 259-270; West and Eastman, pages 266-272, 285-288, 311-315, 326-330; Tenen, pages 251-254; *The Bible*; Collins, Ch. 3, pages 93-110, pages 129-135, Ch. 13, Chs. 22-23.

12. Mohammedanism:—origin, spread by conquest.
West and Eastman, page 282; DeWitt, pages 240-246, 259-270, 302; Collins, Ch. 8.
13. Protestantism:—Wyclif; Huss; Luther; translations of the Bible; **popular education**.
DeWitt, pages 390-398; West and Eastman, pages, 352, 369, 387; Collins, pages 637-641.
14. Norse Mythology:—the gods; the days of the week.
Encyclopaedia Britannica; Arnold, *Balder Dead*.

THEME 6.—SOCIETY (Optional).

This Theme should be attempted only by those instructors who have special training in the social sciences. The following phases of this topic should be emphasized:

- (a) The importance of the family in social organization.
 - (b) The methods and reasons for larger organizations.
 - (c) The basis of classes in society.
 - (d) The mixture of races, and the fact that purity of race is not important.
1. The Principal Social Groups:—the family; the clan (gens, sib); the tribe; the nation; the race.
 - (a) The Family:—the unit of human society; functions; the bearing and rearing of children—their vocational, moral, and intellectual training; division of labor; choice of vocation; property; marriage; personal status; two types, patriarchal and matriarchal. Study the family life of early peoples: Egyptians, Hebrews, Greeks, Romans, Germans, American Indians, and Eskimos.
DeWitt, pages 21, 136, 169, 204, 209; Pahlow, pages 64, 202, 298, 329; West and Eastman, pages 72, 94, 129, 132, 185, 205, 308; *The Old Testament*.
 - (b) The Clan, Gens, or Sib:—the expanded family. Study clan organization among the Greeks, Romans, Germans, Scots, and the American Indians.
DeWitt, pages 27, 136; Gavian, Gray, Groves, *Our Changing Social Order* (Heath); Lowie, *Primitive Society* (Liveright).
 - (c) The Tribe:—A loose term, but generally a group of clans; Greek tribes; Italian tribes; German tribes; Indian tribes; tribal governments; tribal customs; unions of tribes.

DeWitt, page 135; West and Eastman, pages 11, 70, 164, 273, 279; Lowie, *Primitive Society*; Collins, page 82.

- (d) The State:—essentially a political organization in a fixed territory; primary functions—legislative, executive, and judicial; forms—monarchy, oligarchy, republic, feudal state, combination and unclassifiable; privileges, rights, duties, and social status of people under the various forms of government.

DeWitt, pages 99-108; West and Eastman, pages 12, 70, 79, 86, 298.

- (e) The Nation:—definitions; characteristics; nationalism; relation between nation and state; importance of these ideas to-day.

DeWitt, pages 247-256, 376-387.

West and Eastman, pages 291, 297, 317, 322.

- (f) Races of the World:—difficulty of classification; color not reliable alone; four main groups recognized by most ethnologists are Caucasians, Mongolians, Negroes, and Australoids; subdivisions of main groups; division of Caucasians into Nordic, Alpine, and Mediterranean groups; race differentiation in Paleolithic times; subsequent migrations, spread of Indo-European language-stock, infiltrations, conquests, and inter-marriage; effects of physical environment and occupation on races.

DeWitt, pages 30-36, 80, 89-98, 147, 190-193, 202, 227-246; West and Eastman, pages 67, 77, 296; Wells, *Outline of History*.

2. Classes of Society:—class division is found in all society; the important classes of early societies and those of to-day; the bases of class division; varying importance of various classes; slavery and serfdom.

DeWitt, pages 24, 42, 62, 87, 152; West and Eastman, numerous references; Collins, pages 80, 248-258, 427-438.

THEME 7—PEACE AND WAR (Obligatory).

General Considerations:

- (a) The causes and results of wars.
- (b) The waste resulting from war: in property, lives, and human energy.
- (c) The benefits derived from wars.
- (d) The effects of wars in the rise and fall of civilizations.
- (e) Attempts to prevent wars by alliances and unions.
- (f) The fact that most men are not killers; that they must be herded into wars by conscription, and must be taught to hate their enemies; but also—

(g) The fact that most men will fight for certain things that they hold dear—national freedom, political and economic liberty, and liberty of opinion.

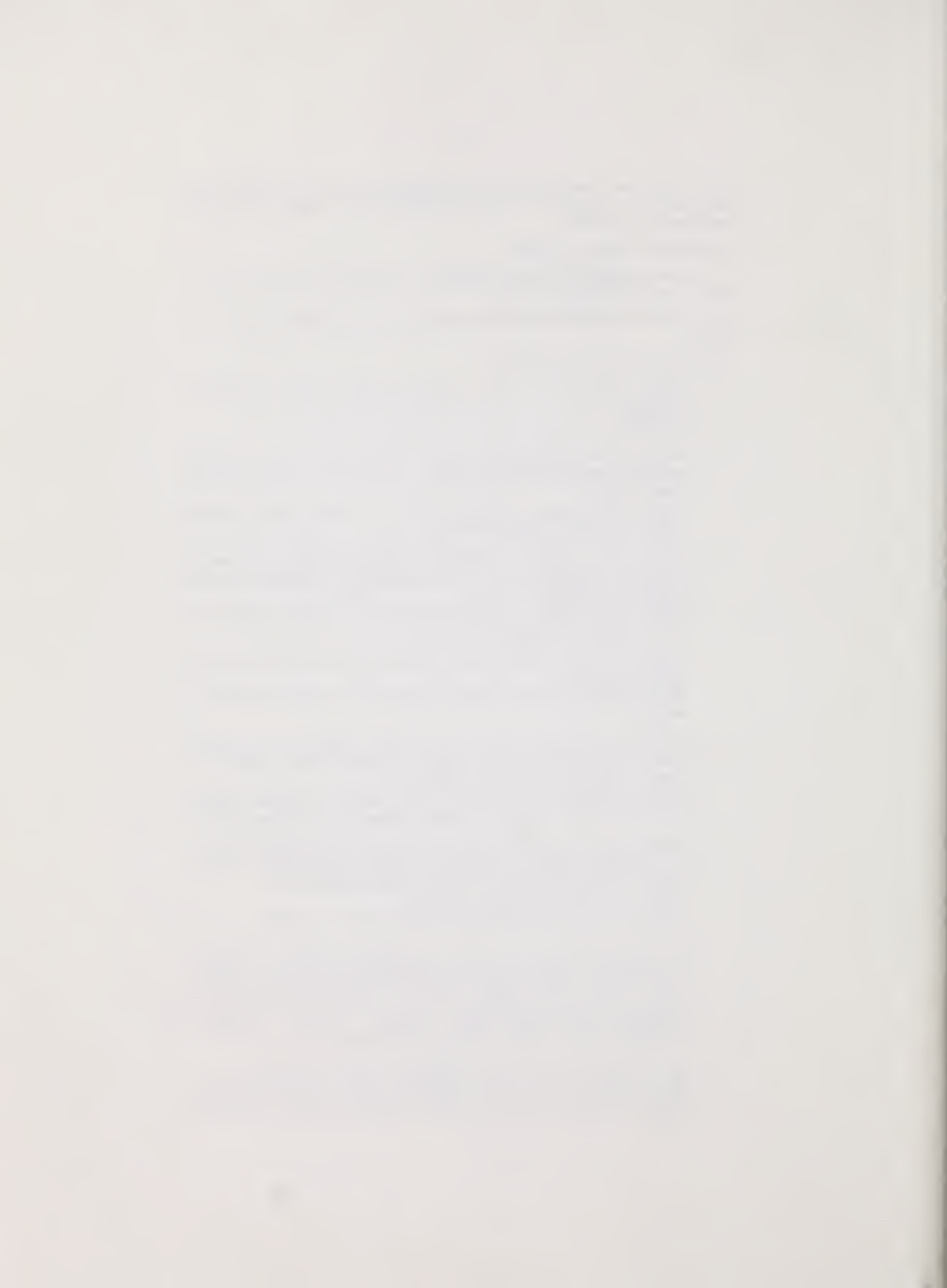
Outcomes to be expected:

(a) An enlightened and objective attitude towards wars of to-day, and the causes of war.

(b) An intelligent desire for peace in our country and in the world.

The topics to be studied are:

1. Tribal Warfare:—wars among Indian tribes of North America.
Quennell: *Everyday Life in Prehistoric Times*.
2. Wars of the Egyptians:—early strife for water, and the remedy; later imperialist wars; weapons; military class; conscription.
West and Eastman, pages 12, 30-34; Tenen, pages 63-65, 70-74; Breasted, pages 104-108.
3. Wars of the Empires of the Fertile Crescent:—causes in general; imperialism of the Assyrians; weapons; walled cities for defense.
West and Eastman, Chapters 38-39, 50; Tenen, pages 86-101; Breasted, Chapters 5, 6, 8.
4. Wars of the Hebrews:—conquest of the Promised Land; wars of defense.
Tenen, pages 81-86; Breasted, Chapter 7; *The Old Testament*.
5. The Wars of the Greeks:—inter-city strife; the Spartan ideal; the Delian League; the Persian Wars; weapons, armour, tactics; value of sea-power.
West and Eastman, pages 93-95, 100-114; DeWitt, pages 109-116; Tenen, pages 117-151; Breasted, Chapters 9-17.
6. Wars of Alexander the Great:—reasons for attack on Persia; military results; mixture of races and cultures; Alexander's encouragement of learning and discovery.
West and Eastman, pages 149-162.
DeWitt, pages 125-133; Breasted, Chapters 19-20.
7. The Roman Wars:—the early struggle in Italy; the Punic Wars and sea-power; wars of conquest for trade and safety; *Pax Romana*; the attitude of the early Christians to war.
West and Eastman, pages 192-201; DeWitt, pages 139-150, 159-166, 169; Tenen, pages 196-202, 209-216; Breasted, Chapters 27-30; Cary, numerous references.
8. The Teuton Invasions:—search for fertile lands.
West and Eastman, pages 273-282; DeWitt, 227-234; Cary, many references; Tenen, pages 258-266; Collins, Chapters 4, 10.



9. Feudalism:—a system born of war; neighbourhood war; the Truce of God.
West and Eastman, pages 298-311; DeWitt, pages 252-254; Collins, Chapter 11.
10. The Crusades:—causes and motives; effects on Europe.
West and Eastman, pages 326-330; DeWitt, pages 293-294, 265-270; Collins, pages 401-425.
11. The foregoing experiences of early peoples should be related to peace efforts in our own time; *the successes of peace efforts should be stressed, and not the failures.*

Every step in this Theme should be related directly to what has already been taken in Theme 1.

SOCIAL STUDIES 2

The course in Social Studies 2 comprises *five themes*, of which *three* are obligatory and *two* optional. For the year 1938-39 the following themes are obligatory: Numbers 1, 2 and 3. From the remaining themes two more are to be chosen.

Teachers are requested not to leave the two optional themes for the end of the year. The following order of themes is suggested: Theme 1; one optional theme; Theme 2; a second optional theme; Theme 3.

The approximate amount of time to be spent on the three obligatory themes is as follows: Theme 1, *thirteen* weeks; Theme 2, *six* weeks; Theme 3, *eight* weeks. For each of the optional themes there will be approximately *four* weeks.

LIST OF BOOKS.

TEXTBOOKS:—No pupil is expected to buy all three.

1. West and Eastman: *Modern Progress*.
2. DeWitt: *A Brief World History*.
3. Schapiro, Morris and Soward: *Civilization in Europe*.

PRIMARY REFERENCES:—The school library should have at least one copy of each for the use of students.

Carl Becker: *Modern History*.

Pahlow: *Man's Great Adventure*.

Beard, Robinson, Smith: *History of Our Own Age and Its Problems*.

Pahlow: *Man's Achievement*, Parts I and II.

Reinach: *Apollo*.

MacKay and Saunders: *The Modern World*.

Elson: *Modern Times and the Living Past*.

Charles Quenneville: *Essentials of Economics*.

Modlin and De Vyver: *Development of Economic Society*.

Cole: *Practical Economics*.

Rugg: *Changing Civilizations in the Modern World*. (Easy reading for students.)

FOR REFERENCE RE CURRENT EVENTS:

K. Gibberd: *The League, Its Successes and Failures*.

Carr: *International Affairs Since the Peace Treaties*.

SECONDARY REFERENCES:

Flenley: *Modern Europe and the World*.

Searly and Patterson: *The Story of Civilization*.

Patterson, Little and Burch: *Problems in American Democracy*.
(Excellent for special reports in Economics.)

Hilton: *Problems and Values of Today*. (Excellent reference for Sociology. See also the references under **Sociology and Psychology 1**.)

Clark: *Introduction to Economic Problems*.

Cohen: *Industry and Life*.

THEME 1.—NATIONAL STATES OF THE MODERN WORLD
(1500-1914). (Obligatory)

Minimum Requirements:

(a) Knowledge of the causes and method of national unification in each instance.

(b) An idea of the position of each state in time.

(c) Knowledge, in each case, of the form of government.

(d) Continual comparison of the states with each other. An attempt should be made to have the pupils appreciate the geographic, economic and racial factors which shaped the growth of each state.

NOTE: The emphasis in this theme is political and territorial. Wars are to be dealt with briefly with reference to general causes and territorial, social and political effects. Questions of colonization, and imperialism, and social legislation are to be treated in outline and only in so far as they relate to the main theme. They are handled in detail in other themes.

PERIOD I.—FROM THE BEGINNING OF MODERN TIMES TO THE
FRENCH REVOLUTION. (1500-1789)

1. England. Strong position of the monarchy under the Tudors; the break with Rome and the establishment of Protestantism; struggle between Stuarts and Parliament; the Puritan Revolution; Restoration; colonization; the Han-

overians; rise of cabinet government; continental wars of 17th and 18th centuries; union with Scotland; rise of the British Empire.

REFERENCES: Becker, Ch. 3; Elson, Chs. 25, 27; DeWitt, Ch. 39; Pahlow, Chs. 3, 6; Schapiro, Ch. 18; West and Eastman, Chs. 36, 39.

2. France. Achievement of national unity; wars of religion; Edict of Nantes (1598); French ascendancy in Europe in 17th and 18th centuries; divine right monarchy; the old regime and its defects; French society and the causes of the revolution.

REFERENCES: Beard, Robinson and Smith, Chs. 2, 8; Becker, Chs. 4, 6; De Witt, Ch. 38; Elson, Chs. 28, 30; Pahlow, Chs. 7, 9-11; Schapiro, Chs. 15, 19; West and Eastman, Chs. 37, 41-42.

3. The Germanies. The Holy Roman Empire; the Protestant Revolt; rise of the Hohenzollerns and Prussia; Frederick the Great and Maria Theresa; the Hapsburgs and their position in Europe.

REFERENCES. Beard, Robinson, Smith, Chs. 3, 7; Becker, Ch. 5; De Witt, Ch. 42; Elson, Chs. 26, 29; Pahlow, Chs. 3, 9; Schapiro, Ch. 17; West and Eastman, Chs. 37, 41.

4. Russia. Formation of Russian state; oriental influences on Russia; rise of the Romanovs; Peter the Great; westernization; territorial expansion.

REFERENCES. Beard, Robinson, Smith, Ch. 3; Becker, Ch. 5; De Witt, Ch. 42; Elson, Ch. 29; Pahlow, Ch. 9; Schapiro, Ch. 16; West and Eastman, Ch. 41.

5. Poland. Weakness of Polish state; partition by Austria, Russia and Prussia.

REFERENCES. Beard, Robinson, Smith, Ch. 3; Becker, Ch. 5; De Witt, Ch. 42; Pahlow, Ch. 9; Schapiro, Ch. 17; West and Eastman, Ch. 41.

6. Spain. Formation of Christian states; unification under the Catholic sovereigns; the inquisition; the Hapsburg alliance; Philip II; revolt of the Netherlands; rise of the Dutch Republic; decline of Spanish power.

REFERENCES. Becker, Ch. 5; De Witt, Ch. 42; Elson, Ch. 26; Pahlow, Chs. 7, 9; Schapiro, Ch. 15; West and Eastman, Chs. 37, 41.

7. Turkey. Rise of the Ottoman Turks; fall of Constantinople (1453); extension of Turkish rule in south-eastern Europe, in Egypt and North Africa.

REFERENCES. Becker, Ch. 5; De Witt, Ch. 37; Pahlow, Chs. 7, 9; West and Eastman, Chs. 35, 41.

PERIOD II. THE REVOLUTIONARY AND NAPOLEONIC ERA
(1789-1815)

1. Course of revolution in France; the experiment in constitutional monarchy; overthrow of Louis XVI and establishment of a republic; Robespierre and Danton; the Convention; the Directory.

REFERENCES. Beard, Robinson, Smith, Chs. 8-9; Becker, Chs. 7, 8; De Witt, Ch. 46; Elson, Chs. 31-33; Pahlow, Chs. 11, 12; Schapiro, Chs. 19-24; West and Eastman, Chs. 42-44.

2. Revolutionary propaganda of republican France; the emigrés; fear of revolution in other countries; Austrian and Prussian intervention; French reverses and conquests; coalitions against France; rise of Napoleon; the First Empire; extent of French power; decline of Napoleon; the Continental System; national uprisings against Napoleon; Congress of Vienna and the new map of Europe.

REFERENCES. Beard, Robinson, Smith, Chs. 10, 11; Becker, Ch. 9; De Witt, Ch. 47; Elson, Chs. 34, 35; Pahlow, Ch. 13; Schapiro, Chs. 25, 26; West and Eastman, Chs. 45, 56.

PERIOD III. FROM THE FALL OF NAPOLEON TO THE WORLD WAR
(1815-1914).

1. England after Waterloo. The age of reform; Chartism; extension of the suffrage; the Free Trade movement; the Irish question; social legislation; woman suffrage; the curbing of the Lords; liberals and conservatives; imperialism.

REFERENCES. Beard, Robinson, Smith, Chs. 19, 23; Becker, Chs. 10, 15, 17, 18, 19; De Witt, Chs. 48, 50, 53, 55; Elson, Chs. 37, 42; Pahlow, Chs. 18, 21; Schapiro, Chs. 21, 40, 50; West and Eastman, Chs. 49, 53, 54, 56.

2. France. The Bourbon Restoration (1815-1830); the bourgeois monarchy of Louis Philippe (1830-1848); the Revolution of 1848 and the Second Republic (1848-1852); the Second Empire (1852-1870); the Third Republic and its development; the new colonial empire; anti-clericalism.

REFERENCES. Beard, Robinson, Smith, Chs. 12, 14, 18; Becker, Chs. 10, 11, 14, 18, 19, 20; De Witt, Chs. 48, 51, 53, 54; Elson, Chs. 38, 40; Pahlow, Chs. 14, 22, 23, 24; Schapiro, Chs. 30, 35, 36, 39, 48, 49; West and Eastman, Chs. 48, 51, 52, 57.

3. Unification of Germany under Prussian Leadership and the Extrusion of Austria. The end of the Holy Roman Empire (1806) and the Confederation of the Rhine; reorganization of Germany by Napoleon; the German Confederation; the Age of Metternich; rivalry of Prussia and Austria; diplomacy of Bismarck and his wars against Denmark, Austria and France; the creation of the German Empire; economic development; colonization. The Hapsburgs and their prob-

lems; the Dual Monarchy; Austrian expansion in the Balkans; the Triple Alliance.

REFERENCES. Beard, Robinson, Smith, Chs. 14, 16, 17; Becker, Chs. 13, 14, 18, 20; De Witt, Chs. 50, 52, 56; Elson, Chs. 38, 39, 41; Pahlow, Chs. 15, 22; Schapiro, Chs. 34, 38, 42, 48, 49; West and Eastman, Chs. 48, 51, 52, 58.

4. Italy. Effect of Napoleonic domination on Italy; Restorations in Italy; the *risorgimento*; growth of nationalism; Cavour, Garibaldi and the creation of the Kingdom of Italy; Papal opposition; economic and colonial development.

REFERENCES. Beard, Robinson, Smith, Chs. 14, 15; Becker, Chs. 12, 20; De Witt, Chs. 52, 53; Elson, Chs. 38, 39; Pahlow, Chs. 16, 24; Schapiro, Chs. 37, 44; West and Eastman, Chs. 48, 51, 52.

5. Russia. Absolute monarchy and feudal aristocracy; emancipation of the serfs; Nihilism and terrorism; beginnings of industrialization; revolution of 1905; social and economic progress; the war with Japan; the Triple Entente.

REFERENCES. Beard, Robinson, Smith, Chs. 20, 21; Becker, Chs. 15, 20; De Witt, Chs. 51, 56; Elson, Ch. 43; Pahlow, Chs. 17, 23, 24; Schapiro, Chs. 32, 33, 46, 47; West and Eastman, Chs. 60, 62, 63.

6. Turkey and the Balkans. The Ottoman Empire in retreat; rise of Balkan states; Congress of Berlin; Young Turk movement; Balkan wars.

REFERENCES. Beard, Robinson, Smith, Ch. 21; Becker, Chs. 11, 20; De Witt, Chs. 51, 56; Elson, Ch. 43; Pahlow, Ch. 24; Schapiro, Chs. 33, 47; West and Eastman, Ch. 63.

7. The Smaller Nations of Europe: Spain, Portugal, Denmark, Norway, Sweden, Switzerland, Holland, Belgium.

REFERENCES. Schapiro, Ch. 45; Elson, Ch. 44; West and Eastman, Ch. 59.

8. The United States of America. Revolt against England and independence; the federal constitution; the Monroe Doctrine; beginnings of industrial revolution; Civil War; rapid economic and social progress after 1865; foreign policy; the United States becomes a world power.

REFERENCES. Becker, Ch. 19; De Witt, Ch. 49; Pahlow, Chs. 17, 20, 24.

THEME 2.—EXPANSION OF EUROPE. (Obligatory)

Minimum Requirements:

- (a) A knowledge of the geography involved.
- (b) An understanding of the motives leading to exploration and development abroad.
- (c) A knowledge of the treatment of native peoples.

(d) An appreciation of imperialism and its effects on Europe as well as on the colonies.

1. Exploration. Portugal, under the leadership of Prince Henry the Navigator, takes the lead in exploration along the West coast of Africa; Diaz discovers Cape of Good Hope and Da Gama voyages to India; Columbus, under the patronage of Ferdinand and Isabella of Spain, discovers the new world; treaty of Tordesillas (1494) divides world between Spain and Portugal.

Early sixteenth century a great era of exploration; search for a north-east and north-west passage to the Indies; Magellan's south-west passage via Cape Horn and the Pacific; the Cabots, Gilbert, Frobisher, Drake, Chancellor and Wilmoughby; Amerigo Vespucci and the naming of America; voyages of Cartier.

2. Exploitation of New Discoveries. Portuguese Empire in the east established by Albuquerque; trading posts on coast of Africa; Spanish settlements in West Indies; Cortez and the discovery of Mexico; Pizarro and the conquest of Peru; wealth of the Aztecs of Mexico and of the Incas of Peru in gold and silver goes to increase European supply of precious metals; the African slave trade; the fisheries on the Banks of Newfoundland; the East India Company.
3. English Colonization. The Virginia Company; founding of Jamestown (1607); rise of plantations worked by negro slaves; tobacco; cotton; the Pilgrim Fathers land at Plymouth (1620); founding of Massachusetts Bay colony and its early history; predominance of lumbering, fishing, trading; settlement of Pennsylvania by Quakers; settlement of royalists in Carolina; Lord Baltimore and the founding of Maryland; New Netherland (New York) captured from the Dutch (1664).
4. French Colonization. Founding of Port Royal (1604) and the settlement of Acadia; Quebec (1608) and the settlement of the Saint Lawrence valley; the Habitant; founding of Hudson's Bay Company and the conflicts between French and English traders; French and Indian wars the counterpart of the English and French wars in Europe; culmination in 1763 with loss of French dominions in America.
5. English Colonies after the Seven Year's War. Economic and social life of the Thirteen Colonies; friction over mercantilistic regulations; rebellion and independence; effect on British colonial policy; United Empire Loyalists; their settlements in Nova Scotia and Ontario; the Quebec Act; struggle for responsible government; Confederation; growth of the Dominion of Canada.
6. Australia. Voyages of Captain Cook (1770-1777); exploration and settlement of Australia, New Zealand, and Tasmania; earliest colonies penal settlements; discovery of gold;

sheep-ranching helps supply world demand for fine wool; economic and social progress; the Commonwealth of Australia.

7. The Partition of Africa. Founding of Cape Colony by the Dutch; the rule of the Dutch East India Company; acquisition by Great Britain (1814); English settlement and the Great Trek; the Orange Free State; discovery of gold and diamonds; the Boer War, its causes and results; England in Egypt and the Sudan.

Colonies of Belgium, Germany, France, Italy, Portugal in Africa; fate of German colonies; Italian adventure in Abyssinia.

8. Europe and Asia. English interests in India in eighteenth century; the East India Company and its rule; creation of the Indian Empire; Dutch acquire Portugese colonies; Java and the Moluccas; French Indo-China; China and the Western Powers; foreign concessions; the opening of Japan; the Russo-Japanese War; recent developments in the Far East.
9. South America. Spanish America under Hapsburgs and Bourbons; Brazil under Portugese rule; achievement of independence; government and politics; social and economic progress of the South American Republics; relations with foreign powers; Pan-American movement.

REFERENCES. Beard, Robinson, Smith, Chs. 4, 22-24; Becker, Chs. 5, 19; De Witt, Chs. 35, 37, 43, 45, 53, 63; Pahlow, Chs. 3, 20, 23; Schapiro, Chs. 11, 17, 48, 49, 50; West and Eastman, Chs. 34, 40, 56, 62.

Additional References:

Stories of Exploration and Discovery: A. B. Archer (Cambridge University Press).

A History of Geographical Discovery and Exploration: J. N. L. Baker (Harrap).

THEME 3. TRADE, INDUSTRY AND STANDARDS OF LIVING. (Obligatory in 1938-39)

Minimum Requirements:

- (a) A knowledge of—
 - (i) The advantages gained through trade.
 - (ii) The value of specialization and division of labor.
 - (iii) The importance of transportation.
 - (iv) The methods of distribution.
 - (b) A study of the life of ordinary people under the changing conditions since 1500.
1. Trade: 16th-18th centuries. Medieval trade routes; shifting of trade centers from Mediterranean to Western Europe; decline of Venice and the Hanseatic League; introduction

of new commodities: sugar, tea, coffee, tobacco, cotton; negro-slave trade; rise of Dutch and English commerce and decline of Portugese and Spanish; rise of capitalism; the chartered company; establishment of colonies; Mercantilism: favorable balance of trade, tariffs, navigation acts; development of banking institutions; influx of precious metals from the New World and the increase in prices; Adam Smith and *laissez-faire* opposition to Mercantilism. REFERENCES. Becker, Ch. 2; Cohen, Chs. 18-23; De Witt, Ch. 40; MacKay and Saunders, Chs. 7, 8; Modlin and de Vyver, Chs. 7-9.

2. Industry: 16th-18th centuries. Little change in medieval industry before the eighteenth century; predominance of guild and domestic systems; no large industrial cities; low standard of living for artisans: long hours and unsanitary conditions; undeveloped resources which are potentially great; attitude of governments to industry; growth of capitalism in industry.

REFERENCES. Becker, Ch. 2; Cohen, Chs. 13, 14; Modlin and de Vyver, Chs. 2, 6; Pahlow, Chs. 10, 20.

3. Agriculture: 16th-18th centuries. Survivals of manorialism; predominance of open-field system an obstacle to improvements; persistence of serfdom in central Europe; the great estate; the small holding; the condition of the peasants.

REFERENCES. Cohen, Chs. 13, 15; MacKay and Saunders, Ch. 8; Modlin and de Vyver, Ch. 5; Rugg, Chs. 1, 2.

4. The Industrial Revolution. Why the revolution began in England; inventions in textile machinery; iron-smelting with coke instead of charcoal; the factory system; the capitalistic employer; the steam engine; the factory town; women and children in industry; increase in proletariat; Malthus and the problem of population; industrial crises; overproduction and unemployment; no protection for the worker.

REFERENCES. Beard, Robinson, Smith, Ch. 13; Becker, Ch. 16; Cohen, Chs. 4, 15; Elson, Ch. 36; MacKay and Saunders, Ch. 1; Modlin and de Vyver, Chs. 2, 6, 10, 15, 16; Pahlow, Chs. 10, 19, 20; Rugg, Chs. 3-6; Schapiro, Ch. 27; West and Eastman, Ch. 49.

5. The Agricultural Revolution. Enclosures in England and the disappearance of the open field; crop-rotation; root-crops for fodder; improvement of breeds of stock; introduction of potato and increased food supply; rise of an agricultural proletariat; machinery in agriculture.

REFERENCES. Cohen, Ch. 15; MacKay and Saunders, Chs. 2, 3; Modlin and de Vyver, Chs. 12, 18.

6. Spread of Industrialism in 19th and 20th centuries. France, Germany. United States; Italy, Russia, Japan become industrialized; after 1870 England no longer the "workshop

of the world"; markets and raw materials; rise of monopoly; the American trust and the German cartel; control of industry by finance; continued technological improvement; steel; electricity; the internal combustion engine; standardization in industry.

Consequence of the spread of industrialism. Rise of trade unionism; socialism; social insurance; government regulation of industry; decline of working hours; greater efficiency; increase in standards of living of working classes; better food and housing conditions, more leisure and education; weakness of the position of the proletariat lacking vested interest in the means of production; strife between capital and labour.

REFERENCES. Becker, Ch. 16; Cohen, Chs. 27-29 and *passim*; MacKay and Saunders, Ch. 9; Modlin and de Vyver, Part IV; Pahlow, Chs. 20, 22, 40, 51; Patterson, Little, Burch, Chs. 5-18; Rugg, Chs. 7-13, 17-21; Schapiro, Ch. 53; West and Eastman, Chs. 50, 55, 61; Cole, *passim*.

7. Free Trade. The Corn Laws; the Anti-Corn Law League; repeal of the Corn Laws; England becomes a free trade country; other countries decline to follow England's example; tariffs; trade treaties; preferential treatment.

REFERENCES. Becker, Ch. 15; Cohen, Ch. 36; MacKay and Saunders, Ch. 7; Modlin and de Vyver, Chs. 14, 21; Quenneville, *passim*.

8. Phenomenal Improvement in Transportation. The railway, the steamship, steel ships; air transport becomes a reality; movements of foodstuffs in bulk: meat and wheat; dependence of Britain on overseas food supply: on United States, Canada, Argentine, Australia.

REFERENCES. MacKay and Saunders, Chs. 2, 3; Modlin and de Vyver, Chs. 12, 18; Patterson, Little, Burch, Ch. 6.

9. Recent Developments. The problem of international debts; neo-mercantilism; the gold standard; the great depression; restrictions on trade; raw materials; England abandons free trade; state ownership of industry and state control of trade.

REFERENCES. Beard, Robinson, Smith, Ch. 34; Cohen, *passim*; Clark, *passim*; Hilton: *Problems of To-day*, *passim*; MacKay and Saunders, Chs. 28-30; Modlin and de Vyver, Chs. 19-21; Patterson, Little, Burch, Chs. 5-18; Cole, *passim*; Quenneville, *passim*.

THEME 4.—GROWTH OF KNOWLEDGE. (Obligatory in 1939-40)

Minimum Requirements:

Students should appreciate the following:

- (a) The importance of knowledge in improving living conditions.
- (b) The increasing tempo in the accumulation of knowledge.

- (c) The methods of modern scholarship and the application of knowledge to life.

1. The New Universe. Copernicus (1473-1543) puts forward the heliocentric theory of the universe. Opposition of church and Aristotelians. Heliocentric theory demonstrated by Kepler (1571-1630), who showed that the orbit of the earth in its path around the sun was elliptical rather than circular as Copernicus had thought. Galileo (1564-1642), who perfected the telescope and discovered the satellites of Jupiter, likewise demonstrated the truth of the Copernican hypothesis. Sir Isaac Newton (1642-1727) showed that the force of gravitation was universal. The universe governed by law. Anthony van Leeuwenhoek (1632-1723) by improving the microscope discovers bacteria and blood corpuscles. Emphasis upon careful observation and experiment as roads to truth. Francis Bacon (1561-1626) points out sources of human error in prejudice and preconceived notions and advocates the inductive method of arriving at truth (i.e. by experiment). John Locke (1632-1704) shows that all our knowledge comes to us through the senses. The Royal Society and French Academy of sciences.

2. Decay of Superstition. Uprooting of old beliefs in the eighteenth century and the insistence on the predominance of reason. Witchcraft and its decline. Insanity not demon possession but a disease. Beginnings of a more rational treatment of crime.

3. Education.

(1) Humanism—emphasis on the study of the Greek and Latin Classics as a basis of education and on the value of this life as opposed to other-worldliness. Erasmus (c. 1466-1536); François Rabelais (c. 1494-1533).

(2) Education fostered by invention of printing and the publication of cheap books. The Bible in the vernacular an incentive to people to learn to read. Chambers Encyclopaedia, 1727. Diderot's famous *Encyclopaedia*, 1752 and following years. John Locke shows that there are *no innate ideas*, but that the mind at birth is a *tabula rasa*, and Rousseau (1712-1778) denounces the old education that treated the child as an adult of smaller stature. In his *Emile* he shows that education is the development of the natural abilities of the child. The French Revolution lays the foundation for state education. Secularization of education. The training of patriots becomes the ideal of the modern state. Spread of popular education in nineteenth century. The newspaper.

4. Development of Science in Modern World.

(1) Theory of Evolution. Darwin's *Origin of Species*. 1859. Theories of natural selection and survival of the fittest. Opposition from theological circles. Henry Drummond's *Natural Law in the Spiritual World* and *Ascent of Man* do

much to break down this opposition. Study of geology shows great age of earth and supports evolutionary doctrine. Lyell's *Principles of Geology*, 1830.

(2) Development of Chemistry and Physics. Importance of chemistry in foods and nutrition, in dyes and drugs, as well as in the manufacture of high explosives and poisonous gases. Discoveries of Physics. Electricity. Röntgen rays (X-ray) discovered (1895). The Radio. Relativity. Perfecting of telescope and development of astronomy.

(3) Science in Medicine. Jenner discovers (1796) a vaccine for the prevention of smallpox. Pasteur (1822-1895) shows that bacteria or germs are at the root of disease. Hence *pasteurization*. Anaesthetics introduce painless surgery. Lister (1827-1912) shows importance of antiseptics. How science has reduced infant mortality and prolonged the span of life. Insulin.

5. The New History. Application of scientific methods to the study of history. Critical study of sources and texts. Widening of scope of history to include man's social and intellectual activities as well as his political. Importance of archaeology and anthropology for the study of history.

REFERENCES. Beard, Robinson, Smith, Chs. 5, 6, 25, 26; Becker, Chs. 7, 16; Pahlow, Chs. 4, 7, 20; Schapiro, Chs. 13, 52; Seary and Patterson, Pt. 2; West and Eastman, Chs. 38, 61.

THEME 5.—EXPRESSION AND AESTHETICS. (Optional)

Minimum Requirements:

Appreciation and understanding of the following:

- (a) Man's need of expressing his thoughts and emotions.
- (b) The value and importance of artistic expression in life.

Each section may properly be the work of one group; each group may then report to the whole class.

1. The Drama. Development of the English drama to 1558; Elizabethan drama; the drama in the eighteenth and nineteenth centuries; French drama; important dramatists of other countries; development of the theatre, the stage, scenery, lighting, and costumes.
2. Music. Development of musical composition since 1500; important composers; the evolution of musical instruments; improvements in technique; relation of music to religion, dancing, drama, patriotism; the opera, the symphony.
3. Painting. Italian artists of the Renaissance: Botticelli, Leonardo da Vinci, Raphael, Michaelangelo, Titian, Correggio; Northern artists of the Renaissance: the van Eycks, Dürer, Holbein, Rembrandt, Rubens; the Spanish school: Valesquez, Goya, Murillo; eighteenth century painters:

Watteau, Fragonard, David, Hogart, Gainsborough, Sir Joshua Reynolds; painters of the nineteenth century; Millet, Corot, de Chavannes, Turner, Watts, Whistler.

Recent painters; relation of painting to the theatre, to religion, to industry; modern trends in painting.

4. Sculpture: Renaissance Sculpture: Donatello, Ghiberti, Michaelangelo; Baroque; Neo-Classicism; Canova, Thorwaldsen; contemporary, Rodin, Epstein; materials; technique; relation to architecture, religion; types, buildings, memorials.
5. Dancing. Folk dances; court dances; dances of the theatre; the ballet; ballroom dances; relation to religion, music, theatre.
6. Speech and oratory. Great speakers; speech in Parliament and in courts of law.
7. Industrial art. Artistic forms in industry; lithography, etching, woodcuts; engraving; colour in industry; art in advertising and display.
8. Architecture. Renaissance style, Italy, France, England; Baroque style; architecture of today; materials of construction; recent styles—industrial, social, educational, governmental, religious; memorials.
9. Modern Trends. The radio; the cinema; photography; the novel; poetry; newspapers; magazines.

REFERENCES. Pahlow, Chs. 4, 5, 10; Reinach, *Apollo*, Chs. 15-25; Seary and Patterson, Pt. 8; Schapiro, Chs. 13, 52. (See also books listed on Music, Art, and Literature.)

THEME 6.—RELIGION. (Optional)

1. The Revolt against the Medieval Church. Luther (1483-1546); Zwingli (1484-1531); Calvin (1509-1564); Knox (c. 1505-1572). Rejection of medieval doctrine of salvation by good works and emphasis on salvation by faith. The priesthood of all believers substituted for a sacerdotal priesthood. The Bible instead of the church becomes the sole religious authority. Individualism of Protestantism leads to multiplication of sects, such as Lutherans, Calvinists, Anglicans, Baptists, Quakers, Socinians. Countries which became Protestant.
2. The Counter-Reformation. The Council of Trent (1545-1663) introduced reforms into the Catholic Church and emphasized doctrines which the Protestants questioned. The Order of the Jesuits and its work in regaining countries lost to Protestantism and in missionary enterprise. The Inquisition, the Index, and the censorship of the Press. Philip II of Spain the militant champion of Catholicism.
3. The Wars of Religion. In France (1562-1594); Schmalkald War in Germany (1547-1555); Puritan Revolt in England:

the Thirty Years War (1618-1648); Peace of Westphalia, (1648).

4. Growth of Toleration. Edict of Nantes, (1598). Locke's Letters on Toleration. Toleration Act (1689). Disabilities of Dissenters. Voltaire (1694-1778) the champion of Toleration. Establishment of freedom of conscience and worship.
5. The Break-Down of Dogmatic Faith in the 18th Century. The Religion of Reason. Deism: rejection of revelation and miracle and emphasis on laws of the universe. The idea that there was a natural religion, the creed of which could be reduced to a few essentials, namely, belief in one God, worship of God by life of virtue, future life of rewards and punishments. *Rousseau's Creed of a Savoyard Vicar in Emile* the finest expression of the deist's creed. Attack on religion in the French Revolution.
6. The Revival of Religion. Pietism in Germany; Jacob Spener (1663-1705); John Wesley and Methodism in England and America. The Romantic Revival and its influence on religion. The Oxford Movement.
7. Science and Religion. Religious opposition to heliocentric theory of the universe and to the theory of evolution. Gradual reconciliation between science and religion. Scientific study of religion according to the comparative method leads to a changed conception of the non-Christian religions. Historical study of Christianity leads to a new interpretation of the Bible.
8. Modern Trends in Religion. Missions and the attempt to convert the Orient to Christianity. Influences of socialism leads to emphasis on social teachings of Christianity. New cults, such as Christian Science. Anglo-Catholicism and its overtures towards Rome. Destruction of the temporal power of the Papacy. Modernism in Roman Catholic Church. Soviet attitude towards religion. Neo-paganism in Germany. Influence of Karl Barth. Religion and war. Religion and the totalitarian state.

REFERENCES. Becker, Chs. 2, 7; Beard, Robinson, Smith, Ch. 5; De Witt, Ch. 34; Elson, Chs. 23, 24, 26; Pahlow, Chs. 2, 6, 8; Schapiro, Ch. 14.

THEME 7.—SOCIETY AND ITS PROBLEMS. (Optional)

Minimum Requirements:

- (a) A knowledge of the organization of society.
 - (b) An appreciation of the delicate adjustments of society.
 - (c) Appreciation of the need for maintaining organized society; and understanding of the fact that the maintenance of society depends on constant adjustment to new conditions.
1. Social Classes (1500 to 1800). Royalty, clergy, knights (especially in Germany), land-owners, merchants, craftsmen, and the lower orders.

Social conditions in the towns and cities of Europe; serf and peasant life in Russia; rural life under absentee landlordism in France, England, and Ireland; social conditions in the American colonial period, especially in the Southern States.

REFERENCES. Beard, Robinson, Smith, Ch. 5; Becker, Chs. 6, 7; Schapiro, Ch. 19; West and Eastman, Chs. 25, 42.

2. Social Classes, 1800 to the present. Aristocracies of birth and wealth; effect of industrial and mechanical revolution upon social life, especially in England; rise of the middle classes—farmers, tradesmen, employers, employees, professional persons; the unemployed.

Social effects of the Reform Bills and Factory Acts in England; poverty in Ireland; social effects of abolition of slavery in U.S.A. and of serfdom in Russia; life of the colonists in Canada; social life on the Western frontiers of U.S.A. and Canada; typical peasant life in China.

REFERENCES. Beard, Robinson, Smith, Chs. 19-20; Becker, Chs. 16-18; Buck, *Good Earth*; De Witt, Ch. 50; Gogol, *Dead Souls*; Victor Hugo, *Les Misérables*; Pahlow, Chs. 14, 22; Rugg, Chs. 7, 11, 18, 20; Schapiro, Chs. 50, 51.

3. Modern Class Distinctions. The Caste system in India; class consciousness in European lands, especially in France, England, and Germany; attempt at abolition of class distinction in Russia; economic basis of class distinctions in United States and Canada.

REFERENCES. Clark, Chs. 9-13 and *passim*; Cohen, Chs. 26, 28, 19 and *passim*; Hilton, Chs. 4, 6 and *passim*; MacKay and Saunders, Ch. 9; Modlin and de Vyver, Ch. 20; Patterson, Little, Burch, Chs. 19-28; Seary and Patterson, Pt. 6; Cole, *passim*.

4. Modern Social Problems.

(a) Problems of the modern family—married women in industry; late marriages; divorces; decline of the birth rate in various countries; changing status of women.

(b) Women in industry—trends; economic and social results; problems of social life of unmarried women workers.

(c) Inequalities and inadequacies of income—unemployment; workingmen's compensation; mothers' pensions; old-age pensions; state insurance.

(d) Social problems—crime and delinquency; mental disorders; mental deficiency; the liquor problem and liquor control; narcotics and drugs.

REFERENCES. See under No. 3, preceding.

Note: Additional references for all the themes may be found by consulting the indexes of the text and reference books.

SOCIOLOGY AND PSYCHOLOGY I

FOREWORD

Tradition has assigned these subjects to the University curriculum. The majority of high school students do not, however, reach the University; yet in a few years they will be called upon to perform the duties of citizenship in a democracy. For this purpose, enlightenment must take the place of naive thinking.

It is the purpose of the course to introduce students to scientific modes of thought regarding social phenomena and problems. The course is concerned mainly with the *structure of society*, the *nature of social behavior*, and the *adjustment of the individual* to his social environment.

Exposition and guidance will be required from the teacher; but the classroom procedure should consist largely of *discussions about problems* with which the students have actual contact, and which have a meaning for them in terms of their own social environment.

There will be plenty of opportunity for *correlation* between Sociology and the social and economic problems raised in Social Studies 2; and also for a similar correlation between Psychology and the unit on Mental Hygiene in Health Education. Both Sociology and Psychology will have points of contact with Vocations and Guidance.

The complete outline in both Sociology and Psychology should not be attempted in one year. Either division may be given the major share of the time, according to the interest shown by the class. *In all classes, however, the course will begin with Sociology*, and conclude with problems in Psychology that are related to personal efficiency and Mental Hygiene. The treatment of these problems should be much fuller in this course than in Health Education.

N.B.—Instruction in these subjects should not be attempted by teachers who have not had university training in Psychology.

Sociology.

The structure of society: industrial society; the modern nation; the democratic state; associations and classes; poverty, crime and punishment.

The processes of society: social thinking; the "mob mind"; barbaric survivals; propaganda.

The outlook for democracy.

Recommended Reference Book for Students:

An Introduction to Sociology: Macdonald (Dent & Sons).

Reference Books for Teachers:

Social Life and Personality: Bogardus and Lewis (Silver Burdett).

Problems and Values of Today: Hilton (Little, Brown Co.).

The Social World: Quinn (J. B. Lippincott Co.).

Psychology.

N.B.—The following outline is offered merely to suggest problems and topics for discussion from which the teacher may select a few that will interest the class.

1. The individual in relation to the social environment.
 - (a) How the individual makes contact with the environment: sense organs; the reaction system (muscles, glands); the central and autonomic nervous systems.
 - (b) The factors of behavior: external stimulation; internal urges; and a reaction system under central control.
2. The individual's equipment at birth; and the growth and development of this equipment.
 - (a) Patterns of behavior—reflex, instinct; levels of behavior. Is there a fighting instinct? What physical or mental traits are inherited? (Physique, nervous system, glandular mechanisms; *not* "temper", or habits.) Eugenics; Mendel's and Galton's laws.
 - (b) Plasticity of the nervous system, or efficiency in learning. What is learning? What is education? Can human nature be changed? How animals learn; how humans learn; how students learn school subjects—language, spelling, mathematics, etc.; memory and forgetting. The acquisition of a skill, such as typewriting. The effect of success, failure, praise, or censure on learning. How to study: good study habits. How to memorize.
 - (c) The function of intelligence; symbols and verbalization; thinking and reasoning; the conditions and requisites of sound thinking; the technique of scientific thinking. Thinking and rationalizing—the "good" reason and the "real" reason.
 - (d) Individual differences in capacities and abilities; special aptitudes; the measurement of capacities, intelligence and abilities.
3. Mental Hygiene: the physical basis, and the development, of personality.
 - (a) Emotions—"Squirming of the internal muscles." How do emotions develop? Why are children afraid of the dark? Of thunderstorms? Why do children exhibit temper tantrums? Education for control of the emotions.
 - (b) The thwarting of urges, e.g., for social approbation, and its relation to emotions and attitudes. Feelings of inferiority or inadequacy; mechanisms of compensation; negativism. What is the psychology of the bully, the "smart Alec," the "sharp" tongue? Normal and abnormal behavior—neurosis, psychoneurosis, regression, and "flight from reality."
 - (c) Attitudes; dominance and submission; the effect of

family life and school life on personality. Personality and character. Can personality be changed? How to get along with other people.

4. Psychology and social life.

- (a) Psychology in industry—fatigue, monotony, interest in work; personal adequacy and self-respect.
- (b) Psychology of the group—the “mob”; group ideals and attitudes; loyalty, patriotism, peace and war.
- (c) The psychology of advertising.
- (d) Propaganda.

Textbook.

No textbook has been authorized.

Reference Books for the Use of Teachers.

Psychology and Practical Life: Collins and Drever (University of London Press).

Psychology and Life: Floyd L. Ruch (Scott, Foresman Co.—Gage).

Social Life and Personality: Bogardus and Lewis (Silver Burdett Co.—Gage).

Mental Hygiene of the School Child: Symonds (Macmillan Co.).

Mental Hygiene and Education: Mandel Sherman (Longmans).

The Psychology of Adjustment: L. F. Shaffer (Houghton Mifflin Co.). Advanced, but an excellent reference for Mental Hygiene.

Guidance in Secondary Schools: Koos and Kefauver (Macmillan Co.).

HEALTH AND PHYSICAL EDUCATION

HEALTH AND PHYSICAL EDUCATION 1

Of the three periods a week assigned to this subject, one should be given to Health and two to Physical Education.

No outline is given here for Physical Education. Teachers are expected to follow the same procedure as that outlined in the *Programme of Studies for the Intermediate School under Physical Education* (page 87), and to consult the reference books there mentioned.

The main points to be observed are the following:

1. Boys and girls are to be trained in separate groups, with procedures appropriate to each.
2. Formal exercises should be given only at the beginning of the period—to secure correct posture and proper control—and at the end. The main part of the period should be devoted to two or more general activities.

The course in *Health Education* which follows comprises four themes.

If sufficient time can not be found for all four of the themes, the class should take Themes I and II, and either Theme III or Theme IV.

THEME I.—GROWTH AND DEVELOPMENT.

Problem I.—How the body is made.

- (1) All living things are made of cells.

Compare the structure of organic matter and inorganic matter.

Discuss the theory that all substances are made of molecules and atoms.

Develop the meaning of an element and a compound.

- (2) Plant and animal cells are similar in structure.

By means of drawings compare the structure of plant and animal cells.

- (3) All cells are composed of protoplasm, an exceedingly complex chemical compound.

From various books find out what you can about protoplasm.

What are some of the constituents of protoplasm?

- (4) Protoplasm has definite properties: (a) it can reproduce;

(b) it can grow; (c) it can obtain and use food; (d) it can eliminate waste; and (e) it can send messages.

Study the amoeba to discover the properties of protoplasm.

Give examples to show that the protoplasm of our cells possesses these properties.

- (5) Many-celled organisms develop cells to do special work.

Explain the need for special cells as bone cells, muscle cells, gland cells, etc.

- (6) All tissues in the body develop from five different kinds of cells: (a) epithelial cells; (b) muscle cells; (c) connective cells; (d) nerve cells; and (e) blood cells.

Make drawings of the various kinds of cells in the body. Show how each type of cell is adapted to do special work.

- (7) Cells of the same kind are grouped together to make a tissue. Name several tissues in the body. Obtain a cut of meat from the butcher shop and examine it to discover various kinds of tissues—skin, blood, bone, muscle, etc.

- (8) When several kinds of tissues are grouped together to perform a definite function, we speak of them as an **organ**.

List the various kinds of tissues in an organ such as the eye, the heart, the stomach. Explain the work of each tissue in these organs.

- (9) Many organs function together to perform definite body processes. We speak of these organs collectively as a system.

Analyze one or two systems, such as the digestive or circulatory, to discover what organs function together to accomplish a special piece of work.

- (10) If one system does not function properly, it interferes with the work of others.

Show how illness or injury of one part of any system interferes with the health of the body as a whole; e.g., a cold in the head may affect digestion; an infected foot may cause increased heart beat, loss of appetite, rapid breathing, etc.; diabetes, a disease of one organ, disturbs the functioning of various parts of the body.

Problem 2.—How we began.

- (1) Early scientists believed that life developed spontaneously; e.g., Aristotle, Bacon. Pasteur proved that life must come from life.

By reference to an encyclopaedia or a science textbook, try to discover some of the early beliefs regarding the origin of life.

Read the life of Pasteur to discover how he proved that all organisms have parents like themselves.

- (2) Simple forms of life reproduce by cell division, by budding, by spore formation. They are known as asexual organisms.

Read, in a textbook on Biology, about the reproduction of the yeast plant, of moulds and of bacteria.

- (3) Reproduction in higher forms of life is carried on by special sex cells and by means of two parents.

Read, in a textbook on Biology, about the reproduction of the fish.

Can a reason be given for the fact that the higher forms of life reproduce by two parents.

- (4) Higher forms of life have special reproductive organs.

N.B.—There are obvious difficulties for the teacher in this topic. Where boys and girls cannot be taught separately, it will be sufficient to have in the classroom for reference a good textbook that explains the reproductive system; such as *The Human Body*, by Best and Taylor, or *Hygiene for Students and Teachers*, by Eastwood.

Problem 3.—Heredity.

- (1) Sex cells are similar in structure to body cells except that they carry the hereditary qualities of the species.

Make a drawing of a sex cell, showing *nucleus* containing *chromatin* and *centriole*.

- (2) Sex cells divide in a very definite manner.

By drawings, show steps in cell division: (a) the centriole changes; (b) the chromatin becomes chromosomes; (c) the chromosomes split longitudinally and move to each side of the cell; (d) the cell divides; and (e) two daughter cells appear, similar to the original cell.

- (3) Chromosomes are the vital part of the sex cell. It is believed that they are composed of *genes*, microscopic bodies which are responsible for carrying the characteristics of the species. The number of chromosomes is fixed for each species.

Explain the significance of the chromosomes. Have the class understand how we get our inheritance. Human beings have 48 chromosomes, 24 from the mother and 24 from the father.

- (4) Heredity means that certain characteristics or qualities are carried from parents to offspring by means of the genes in the chromosomes.

Explain Mendel's principle of dominant and recessive characteristics.

Discuss characteristics that are inherited by human beings.

- (5) Eugenics is a study of the laws of inheritance as applied to the human race.

Discuss the meaning of a good inheritance. Show that desirable qualities as intelligence, perseverance, special abilities seem to 'run' in families. Show also that feeble-mindedness, irresponsibility and shiftlessness have appeared again and again in certain families.

- (6) Heredity is an extremely important factor in health.

Emphasize the fact that diseases are not inherited; but that we do inherit a bodily set-up which is resistant or susceptible to certain diseases. Discuss a disease such as tuberculosis, explaining that several members of a family may develop the disease, not because they inherit it, but because they may infect one another by contact. Probably the family has not a high resistance to disease.

Show that stature, temperament and other inherited characters, affect one's disposition to health or disease.

- (7) Healthful living overcomes handicaps in heredity.

Discuss the fact that people who inherit a somewhat delicate constitution can become strong and vigorous by right living, as did Theodore Roosevelt. Individuals who may be susceptible to tuberculosis can build up a high resistance by plenty of rest, good nutrition, out-of-door exercise, etc.

References for Theme I:

Hygiene for Students and Teachers: Eastwood (Macmillan Co.).
The Human Body: Best and Taylor (Gage Co.).
Growing Up: de Schweinitz (Macmillan Co.).
Sex for Parents and Teachers: Stowell (Macmillan Co.).
The Adolescent Girl: Richmond (Macmillan Co.).

THEME II.—PERSONAL EFFICIENCY.

Problem 1.—How to develop one's personality.

- (1) Life is a quest for happiness for ourselves and for others. Two of the most important factors fundamental to happiness are *mental health* and *physical health*.

What are the qualities of good mental health which distinguish it from poor mental health?

Discuss the desirability of understanding one's self and one's motives; of possessing good habits of working, playing, thinking, feeling; of being able to make friends easily; of developing wholesome interests; and of adjusting one's self to the world of people and objects about him.

- (2) It is important to understand one's *motives*. Every organism has appetites, "drives" or urges to satisfy. Some of these are natural or constitutional; as the appetite for food, sleep, sex, and contact with others. Other appetites seem to be acquired; as the desire for approval, and the desire for achievement.

List a number of *appetites* which appear independently of learning.

Discuss some of the acquired appetites. Should all appetites be satisfied directly and immediately?

How are appetites to be modified or redirected?

- (3) It is necessary for us to know what are good *habits*, and what are bad, in achieving sound mental health.

Many habits are modes or mechanisms of adjustment in the satisfaction of drives.

Discuss a few of the more common mechanisms: compensation, identification, escape reactions, defense reactions, regression, rationalization, projection.

Find illustrations of these devices in history, in literature or in every-day life.

Consider how they should be corrected.

Is it possible for a dominating person to have a weak personality?

- (4) The inordinate use of alcohol is often associated with quirks or weaknesses of personality.

Is the habitual or occasional drinking of alcohol related to any of the mechanisms discussed in the preceding section?

Discuss the following reasons given by young people who have formed the habit of drinking beverage alcohol: (a) For the sake of sociability. (b) To be smart; —all the “best people” serve cocktails. (c) The pressure of the social group. (d) Stimulation required to keep the pace. (e) To escape from facing unpleasant situations. (f) To cover up what one considers personal shortcomings.

Examine the statement: “I can take a drink or leave it alone.”

- (5) It is essential to be well adjusted socially. Much of present-day life is social life, and human beings constitute a large part of one's environment.

What is the basis for sound friendship?

What are some home responsibilities that young people should shoulder?

Can a procedure be found for learning to control one's temper?

One forgets a grudge in an “attack on the woodpile.” Explain.

What are the qualities that make one popular? Can these be cultivated, and if so, how? Each pupil might undertake to acquire at least one quality which he admires in others.

What qualities make for unpopularity? (Bad temper, irritability, selfishness, sulkiness, etc.)

Each student should examine himself in this connection and attempt to eliminate at least one undesirable quality.

- (6) We should make good use of leisure time.
 "Learn to do something with your hands." What are the possibilities for useful and valuable hobbies of this kind?
 What hobby clubs can be organized and fostered in a high school?
- (7) We should learn to be good citizens. It is important to read the newspaper, to take an interest in current events, to think about problems of the day. We should appreciate what the community does for its citizens.
 Discuss some community problems.
- (8) It is important to understand oneself; to judge accurately one's ability to do things; and to analyze the causes of one's failures.
 What is a "good sport"? Can one who does not do as the crowd does be considered as "a good sport"?
- (9) Life is a quest for happiness. There are certain factors fundamental to happiness in all individuals: good physical health, a measure of success in one's undertakings, confidence in one's ability to do certain things, ability to take criticism, a sense of humor, etc.
 List suggestions for making life successful.
 How does the forming of good habits ease the strain of life?
 What routine health habits help to insure good health?
 Discuss the traits that make leaders "popular."

REFERENCE BOOKS FOR MENTAL HYGIENE.

Mental Hygiene of the School Child: Symonds (Macmillan Co.).
Mental Hygiene and Education: Sherman (Longmans).
 See also the list of reference books for *Sociology and Psychology* 1.

Problem 2.—How to make the most of personal appearance.

- (1) Neatness and cleanliness make for a smart appearance.
 Clothes should be chosen wisely.
 Draw up a scheme for analyzing personal appearance.
 Discuss the choice of clothing suitable for school, for sport, and for special occasions, such as parties.
- (2) Diet, rest, fresh air and cosmetics affect the complexion, and the state of the skin.
 What are the common skin diseases, and how can they be prevented?
 Discuss the need for caution in the use of cosmetics.

Examine some of the advertisements for cosmetics, noting how the appeal is made.

Why is there so much advertising of cosmetics?

(See *Skin Deep*, by Phillips.)

- (3) Good posture give a feeling of well-being and confidence, and makes a favorable impression on others.

Analyze the factors that make for good posture. (The students should examine and criticize their posture.)

- (4) Certain health practices have an effect on appearance,—taking sufficient rest, and selecting a proper diet.

What is the function of sleep? What may result from lack of it?

Read the booklet, *Refresh Yourself*, to be had free from the Canadian Tuberculosis Association.

Why should one watch a tendency to overweight?

Discuss common practices in "dieting." Why is "dieting" often harmful? Study advertising material regarding losing and gaining weight.

Make a list of the accepted rules for choosing food, with special reference to vitamins, roughage, and minerals.

- (5) The care of one's teeth is important for good appearance.

What causes inflamed and bleeding gums?

How does diet affect the teeth?

Discuss current advertisements of tooth pastes and toothbrushes.

(See *One Hundred Million Guinea Pigs*, by Kallet.)

Problem 3.—How to keep well.

- (1) Some diseases are more common to young people especially infectious diseases. As one grows older one's resistance to germ diseases increases.

It is important to be vaccinated and to be inoculated for certain diseases if they are present in a community.

Explain the modern method of vaccination against smallpox. Look up the history of smallpox.

Find out how toxins and antitoxins are made. Why do these build up an immunity in the body?

- (2) Diseased tonsils, adenoids or abscessed teeth are often foci of infection for the body.

Discuss the work of the tonsils and adenoids.

What is meant by a focus of infection? What harm can these points of infection do?

- (3) Certain simple procedures prevent one from catching diseases from others.

Discuss such health practices as using one's own towel and other toilet articles, washing hands before touching food; keeping up a high resistance, etc.

- (4) The common cold often leads to something more serious. It is due to a virus infection which attacks the body when resistance is low.

Discuss how one can catch a cold from oneself; from other people.

What is meant by a virus infection?

What are recommended treatments for colds?

- (5) Smoking and "drinking" are practices that may develop into habits injurious to health.

Look up the results of authoritative investigations regarding the effect of alcohol and of tobacco on different physical or mental functions of the body.

Why do athletic coaches rule out tobacco?

Why are Arctic explorers forbidden to use alcohol?

- (6) There are many health fads and fallacies prevalent today. Patent preparations of all kinds are used, and many of them are of little value.

People are still superstitious.

Collect advertisements of "health foods," and of remedies and treatments for disease. Discuss the value of these advertised articles.

List some common superstitions. Read *Eat Drink and Be Wary*, by Schlink; or *Devils, Drugs and Doctors*, by Haggard.

Additional References for this Theme:

Hygiene for Students and Teachers: Eastwood (Macmillan Co.).

Man Versus Microbes: Kopeloff (Garden City Publishing Co.).

Devils, Drugs and Doctors: Haggard (Harpers).

One Hundred Million Guinea Pigs: Kallet (Vanguard Press).

Skin Deep: Phillips (Vanguard Press).

Eat, Drink and Be Wary: Schlink (Corvici-Friede).

THEME III.—SOME PRESENT-DAY HEALTH PROBLEMS FOR YOUNG PEOPLE.

Problem 1.—The Social Diseases.

Syphilis.

- (1) The origin of the disease is obscure. One theory is that it was introduced into Europe from America by Columbus and his men.

The disease spread through Europe in epidemic proportions during the 16th and 17th centuries. It appeared in a particularly virulent form causing large sores and was known as the great pox.

Discuss venereal diseases in a straight-forward, clear-cut manner, treating them as you would any other infectious disease. The class should realize that syphilis has become a scourge of the world, and that it spreads because of ignorance. A false sense of modesty prevents the spread of information concerning the disease.

- (2) Syphilis is a great menace to young people. In Canada 44,765 people were treated in clinics during 1935 for venereal diseases, and it is estimated that in this year there were more than 30,000 cases of syphilis. In the United States 600,000 newly infected people receive treatment each year. The disease is becoming rare in the Scandinavian countries because of education and compulsory treatment. Treatment is compulsory in Canada except in the provinces of Quebec and Alberta.

- (3) The cause of the disease is a corkscrew-shaped organism known as the *spirochaeta pallida*. The disease is obtained chiefly through contact with infected persons.

Allow the class to read accurate and reliable articles about syphilis. Suggested readings are the following: *Syphilis*, in *Hygeia* for March, 1937.

The Scourge of the World, in *Maclean's Magazine* for October 15th, 1937.

Health League of Canada, Toronto, Ontario.

- (4) The disease is not, in a strict sense, inherited; but it may be passed to an unborn child through the blood of the mother. Syphilis has definite symptoms that fall into three stages. It can be discovered by an accurate blood test known as the Wassermann Test.

The treatment, an arsenic compound, was discovered by a German scientist, Paul Ehrlich, in 1912 after twenty years of work.

Every adult should be aware of the disease, means of contracting it and the terrible tragedies it creates in crippling the physical and mental health of an individual.

Read the story of *Ehrlich's* experiments in *The Microbe Hunters*, by De Kruif.

Gonorrhoea.

- (1) This is an infectious disease caused by the gonococcus, a spherical-shaped organism. It was isolated by a German bacteriologist, Neisser, in 1879.

It can be transmitted by contact and by means of towels, bedding and toilet seats.

Discuss types of bacteria. Show that the gonococcus is an organism similar in shape to the pneumococcus

(causing pneumonia) and the streptococcus (causing scarlet fever).

Explain methods used to isolate specific germs. (See life of Koch.)

Explain precautions to be taken to prevent infection; as avoiding public towels, covering toilet seats in public places.

- (2) Gonorrhoea causes a marked inflammation of the genito-urinary tract, which frequently causes permanent damage. It is one of the most important causes of blindness in infants. The disease can be treated and cured and every effort should be made to prevent its spread.

Emphasize the importance of consulting a doctor about unusual symptoms so that prompt treatment may be started.

References for this Problem.

The Microbe Hunters: De Kruif (Harcourt Brace).

Devils, Drugs and Doctors: Haggard (Harper Brothers).

Man versus Microbes: Kopeloff (Garden City Publishing Co.).

Problem 2.—Alcoholism as a social and economic problem.

- (1) "Alcohol and gasoline don't mix". The law imposes severe penalties on persons who attempt to operate motor vehicles when under the influence of alcohol.
- (2) Organized society has to contend with poverty, child neglect, crime, insanity, broken homes, disease, misery and inefficiency.

Make an investigation to discover how the use of alcohol is related to these problems.

Review, in this connection, Problem 1 of Theme 2; and consider what effect a general improvement of the economic and social environment might have on the problem of alcoholism.

Discuss government control of the liquor business.

THEME IV.—HEALTH IN EMERGENCIES.

This theme is planned for a school where boys and girls can be taught separately. Home Nursing is to be given to the girls, and First Aid to the boys. If, however, it is impossible to divide the class, First Aid may be taken with both boys and girls.

A.—Home Nursing.

This unit is planned to give only very simple instruction in the care of the sick. Very little equipment is needed and the cost of such equipment should be only a few dollars.

- (1) Health and the home: (a) choosing the sickroom; (b) furnishing, arranging, cleaning and caring for the sickroom;

(c) keeping the home clean—special care of the kitchen and bathroom; (d) care of laundry in the home; (e) care of garbage and waste material.

Discuss such points as how to make a sickroom attractive, how to get good ventilation, elimination of unnecessary furniture, choosing the bed and bedding, etc.

- (2) The home nurse: (a) duties of a home nurse; (b) dress and personality of the home nurse; (c) good management in the sickroom; (d) how to protect oneself against infections and keep well.
- (3) Daily routine in the sickroom: (a) morning care—how to give a cleansing bed bath; how to make and change the bed; care of the teeth and hair; (b) how to prepare a patient for meals; (c) how to get a patient up in a chair; (d) how to prepare a patient for the night.

By demonstrations with a large doll show how to give a bed bath. With a large doll's bed or on a Winnipeg couch show how to make a bed when empty and also with a patient in it.

- (4) Indications of sickness: (a) common symptoms of illness as sore throat, headache, vomiting, pallor, pain, and the significance of these; (b) temperature, pulse and respiration; (c) inflammations.

Discuss symptoms of a few common diseases as measles, mumps, appendicitis, etc.

Teach the class how to read a thermometer, how to take pulse and respirations. Discuss why these change with illness. What causes inflammation? What are the signs of inflammation?

- (5) Care of patients with communicable diseases: (a) care of bed linen, towels, dishes, etc. to prevent spread of infection in the house; (b) how the nurse should protect herself from taking the disease; (c) complications of some of the common communicable diseases; (d) how to clean and disinfect a room.

Discuss ways in which disease germs are transmitted. Discuss common methods of disinfection as heat, sunshine, soap and water, chemical disinfectants.

Explain why fumigation has proven valueless.

- (6) Feeding the sick: (a) how to set a tray; (b) choice of foods—kinds of diets, as liquid, soft and light, and when they are indicated; (c) how to feed a patient in bed.

Give a demonstration on how to set a tray.

Discuss diets for various types of illnesses, as a common cold, measles, anaemia, a broken leg, etc.

- (7) How to prepare and give simple treatments: (a) a mustard plaster; (b) a linseed poultice; (c) hot and cold compresses;

(d) testing and filling a hot-water bottle; (e) how to give medicines.

Give demonstrations in teaching these if possible.

- (8) Care of special injuries or ailments, as vomiting, earache, sties, sleeplessness, nosebleed, wounds, stings, hiccough, sunstroke, etc.

Discuss how to improvise and make such things as a backrest, a bed-table, a tray, a cradle, sterile dressings, etc.

Reference:

American Red Cross Textbook on Home Hygiene and Care of the Sick, published by P. Blakiston's Son and Co., Philadelphia.

B.—First Aid.

- (1) One in twenty of all deaths in Canada in 1935 were caused by accidents. It is estimated that about one-third of accidents happen in the home, one-third on streets and highways and the rest in factories, in industry, and in sports.

Obtain figures on accidental deaths from the Dominion Provincial Bureau of Statistics and from insurance companies. Discuss means of eliminating accidents in the home and on streets and highways.

- (2) Accidents on streets and highways: (a) how such accidents happen; (b) principles of treatment; (c) what to do for fractures; (d) how to treat deep cuts and severe bleeding; (e) how to apply dressings; (f) how to lift and carry a patient and when not to move him.

Collect newspaper clippings on accidents and discuss the cause, possible injuries and what should be done. Show how to apply splints, how to treat fractures when splints are not feasible; how to apply a tourniquet and pressure bandages to check bleeding, etc.

- (3) Accidents in the home: (a) reasons for so many home accidents; (b) treatment for such accidents as—(i) dislocations and sprains, (ii) burns and scalds, (iii) electric shock and suffocation with gas, (iv) poisoning, (v) choking, swallowing a pin.

Discuss newspaper accounts of home accidents.

Analyze fire dangers in a home.

Discuss ways of improving housekeeping to prevent accidents.

Show by demonstrations how to give first aid for common types of home accidents.

- (4) Accidents in sports: (a) swimming and boating; (b) skating, skiing and sleighing; (c) games such as football; (d) gunshot wounds.

Discuss precautions to take to prevent accidents in sports. Analyze these activities to determine

what are likely to be the common accidents. Give demonstrations of how to do artificial respirations, etc.

- (5) Accidents and emergencies at school: (a) nose bleed; (b) fainting; (c) cuts, wounds, scratches; (d) burns, particularly from acids and chemicals.
- (6) Materials that should be on hand at home and at school to meet emergencies. Plan and equip a first aid kit for school use.

References:

Accident Prevention and Elementary First Aid: Red Cross
Calgary. First Aid to the Injured: St. John Ambulance
Association.

PHYSICAL EDUCATION 2.

A suggested outline for this course will appear early in the school term.

MATHEMATICS

ALGEBRA

Algebra 1.

The prescribed textbook constitutes the course.

Textbook:—Betz, Robinson and Shortliffe: *Algebra for To-day* (Ginn & Co.).

GEOMETRY

Geometry 1.

Books III and IV of the authorized textbook, with Proposition 15, Book IV, omitted.

Textbook:—McDougall and Sheppard: *High School Geometry* (Copp Clark Company).

N.B.—A new textbook is in preparation for use during the year 1939-40.

GENERAL MATHEMATICS.

General Mathematics 1.

This course will be outlined in a special syllabus, to be had at a small charge from the School-Book Branch of the Department of Education. It will not be available until the last week in August.

The syllabus will comprise, in a wide range of variety, many different *units of work*, from which the teacher may select those most appropriate to the needs of his class. Under this arrangement, it will be possible either to give the course a "technical" or a "commercial" bias, or to "dilute" the course in a practical way for students who do not intend to proceed to higher academic work.

For the "diluted" course, *either* or *both* of the following books were used last year in the place of a textbook, and they may so be used during the year 1938-39 to the extent suggested by the syllabus:

Algebra for Use, Book III (Mathematics for Junior High Schools); (John C. Winston & Company).

Mathematics for Technical Schools, by Warren and Rutherford (Copp Clark Company).

If the latter book is used, the following suggestions are offered:

For a maximum course—

(a) Omit about 74 pages:—

Pages 63-81 (Chapter VI), "Application of Measures to Trades".

Pages 139-191 (Chapter X), "Mathematics of the Machine Shop".

- (b) Include a section on *Variation* (1921 Edition), pages 288-296.
- (c) Include a section for girls on the types of problems related to home-making, millinery and dress-making; e.g., menus, bias problems, etc.
- (d) What Theoretical Geometry is required may be supplied by the teacher.

Teachers desiring to give the course a "commercial" bias may find either of the following to be suitable:

A Canadian Arithmetic for High Schools: Stanley and Smith.

Essentials of Business Arithmetic: Kanzer and Schaaf.

All teachers are advised, however, to make use of the syllabus.
(See the references following.)

REFERENCE BOOKS

The following books will be found useful for reference in connection with the syllabus:

Applied Mathematics for Girls (Bruce Publishing Co., Milwaukee).

Business Arithmetic (Complete Course): Thompson.

Manual and Answer Book for the foregoing.

Arithmetic for Engineers: Clapham (Chapman and Hall, London).

Mathematics for Modern Life: McCormack (Appleton-Century).

General Mathematics 2

This course is of the same form as **General Mathematics 1**, but is more advanced.

Units of work and appropriate references will be found in the second part of the syllabus for **General Mathematics 1**.

No textbook has been prescribed.

SCIENCE

BIOLOGY

Biology 1.

As outlined in Parts I-V (inclusive) of the authorized text-book.

Textbook:—*Canadian Agriculture for High Schools* (Macmillan Company).

FOR THE REFERENCE LIBRARY.

At least one of the following books should be found in the classroom library for reference:

Everyday Problems in Biology: Pieper, Beauchamp and Frank (Gage & Co.).

Teachers' Guide Book for the foregoing.

Our Environment—The Living Things in It: Wood and Carpenter (Allyn and Bacon).

High School Biology: Benedict Knox and Stone (Macmillan Co.).

Biology for Today: Curtis, Caldwell and Sherman (Ginn & Co.).

Problems in Biology: Hunter (Gage & Co.).

Biology for Everyman: Sir J. Arthur Thompson—Two Vols. (Dent & Sons).

CHEMISTRY

Chemistry 1.

Textbook:—Black and Conant: *New Practical Chemistry* (Macmillan Company). Chapter 14 is optional. Chapter 22 is to be omitted.

For Reference:—*Teachers' Manual for Practical Chemistry*, by the same authors, may be obtained from the School-Book Branch.

New Laboratory Experiments in Practical Chemistry: Black (Macmillan Company).

GENERAL SCIENCE

INTRODUCTION.

The following courses largely disregard all artificial divisions into specialized fields of subject-matter. They are based on the assumption that, as members of society, we should have an intelligent attitude toward the universe in which we live. Such an attitude can be developed only as we make an attempt to under-

stand man's environment and his attempts at control of the environment; of the forces of the earth, including those which operate within his own body. To-day the school is shifting its emphasis from information, as the sole objective of education, to right attitudes and ideals, and to proper response to actual life situations.

Facts are necessary, but it is the relationship of facts to each other that is important. In these courses, as in similar courses of the Elementary and the Intermediate School, *the scientific method of thinking* is to be emphasized. We must inculcate in our students the habit of thinking from cause to effect, and back from effect to cause. At the same time we must furnish a fund of scientific information that will help the students to interpret their environment.

Science reading is an effective means of instruction. Reading should be organized and assigned definitely to encourage students to extend their science training beyond the school period. A number of carefully selected reference books should be available to the students. They should be encouraged and directed to the reading of popular literature in the field of science. The teacher should stimulate interest in a scientific article; make the magazine or book containing it available to the class; or ask one or more students to make a report to the class.

General Science should employ excursions to fields, woods, museums, and industries, where actual examples may be found of phenomena studied in class. After the return to the school, reports and discussions should follow. Interest should be stimulated toward further study—reading, observation, or construction—either by individuals or by groups.

The connecting thread in this course is the study of energy. Life is presented as a complex of energy transformations. Living things make use of supplies of energy and material; their activity is determined by the supplies of energy that they can tap.

GENERAL SCIENCE 1.

N.B.—It is the intention of the Department of Education to have prepared during the year a syllabus for General Science 1 and 2.

In the meantime the outlines which follow may be used by the teacher. It is to be stated emphatically, however, that the outlines are suggestive only. The teacher is quite free to rearrange, expand or condense the material, to add to it or subtract from it, and to make use of material from other books.

The important thing is that the course be adapted to the special needs of each class. It is intended to take the place of the special courses formerly offered to commercial or technical classes.

The following chapters selected from the textbook will constitute the body of material to be used in this course:

Chapter II. "The Earth in Relation to Other Heavenly Bodies".

The following sections only:

Section 3. Latitude and Longitude.

Section 4. How Time Is Measured.

Chapter IV. "The Production and Use of Heat".

The whole Chapter.

Chapter VII. "Industrial Application of Water Pressure".

The whole Chapter.

Chapter IX. "Putting the Air to Work".

From section 6, Pumps and Siphons, page 212, to the end of section 12, Measurement of the Amount of Moisture in the Air, page 230.

Chapter XII. "The Nature of Chemistry".

Omit section 14, Valency.

Chapter XV. "The Relation of Chemical Processes to Everyday Life".

Omit from the beginning of section 3, Speed of Chemical Reaction, page 343, to the end of the Chapter, page 361.

Chapter XVII. "The Origin and Transmission of Sound".

The whole Chapter.

Chapter XXI. "Light and Colour".

Omit from the beginning of section 4, Fatigue of the Eye, page 471, to the end of the Chapter, page 478.

Chapter XXII. "Illumination and Its Measurement".

The whole Chapter.

Chapter XXV. "The Electric Current".

The following sections only:

Section 2. Magnetism Is Produced by Electricity, page 517.

Section 7. Theory of a Voltaic Cell, page 527.

Section 8. Polarization, page 529.

Section 9. Varieties of Voltaic Cells, page 529.

Section 15. Application of the Heating Effect of Electricity, page 540.

Section 16. Electric Lighting, page 541.

Chapter XXVII. "Electricity and Its Relation to Magnetism".

Omit the following sections:

Section 8. Dynamos.

Section 9. Electric Motors and Starting-box.

Section 10. Transformers.

Textbook:

T. B. Allen and W. P. Ferguson: *Elementary Science* (The Ryerson Press).

REFERENCE BOOKS.

- Reed, Rexford and Carroll: *Useful Science for High Schools* (1935), (The John C. Winston Company).
 Pieper and Beauchamp: *Everyday Problems in Science* (1936), (W. J. Gage & Company).
 Wood and Carpenter: *Our Environment*, Book III (1934), (Allyn and Bacon).
 Watkins and Bedell: *General Science for To-day* (1936), (The Macmillan Company).
 Powers, Neuner, and Bruner: *A Survey of Science* (1935), (Ginn and Company).
Science in Our Lives (1938): Gruenberg and Unzicker: (World Book Company).
Exploring the World of Science: Lake-Harley-Welton (Silver Burdett Company).
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GENERAL SCIENCE 2.

N.B.—See the special note preceding the outline for General Science 1, above.

The following Chapters, selected from the textbook, will constitute the body of the material to be used in this course:

Chapter I. "Living Things in Relation to Their Environment".

The following sections only:

Section 9. Variation in Plants.

Section 10. Plant Breeding.

Section 11. Plant Fossils.

Section 12. Conditions Affecting Animal Growth.

Section 13. Distribution of Animals.

Section 14. Variation in Animals.

Chapter II. "The Earth in Relation to Other Heavenly Bodies."

Section 1. Size and Shape of the Earth.

Section 2. Movements of the Earth; Day and Night; the Seasons.

Section 5 The Solar System.

Chapter VI. "The Commercial Importance of Water."

The whole Chapter.

Chapter VIII. "What is Burning?"

The whole Chapter.

Chapter X. "The Ocean of Air About Us."

The whole Chapter.

Chapter XI. "Calculations Relating to Heat."

The whole Chapter.

Chapter XII. "The Nature of Chemistry."

Section 14. Valency.

Chapter XIII. "Some Industrial Gases."

The whole Chapter.

Chapter XIV. "Acids, Bases and Salts."

The whole Chapter.

Chapter XV. "The Relation of Chemical Processes to Everyday Life." Omit Sections 1 and 2.

Chapter XVI. "Earth Products in Industry."

The whole Chapter.

Chapter XVIII. "Musical Sounds; Pitch and Quality."

The whole Chapter.

Chapter XIX. "Light and Its Reflection."

The whole Chapter.

Chapter XX. "Refraction of Light and Its Applications."

The whole Chapter.

Chapter XXI. "Light and Colour."

Omit Sections 1, 2 and 3.

Chapter XXIII. "Magnetism."

The whole Chapter.

Chapter XXIV. "Electricity at Rest."

The whole Chapter.

Chapter XXV. "The Electric Current."

Omit Sections 2, 7, 8, 9, 15 and 16.

Chapter XXVI. "Electrical Resistance."

The whole Chapter.

Chapter XXVII. "Electricity and Its Relation to Magnetism."

Section 8. Dynamos.

Section 9. Electric Motors, and Starting-box.

Section 10. Transformers.

Chapter XXVIII. "Elementary Principles of Radio."

The whole Chapter.

Textbook: T. B. Allen and W. P. Ferguson: *Elementary Science* (The Ryerson Press).

REFERENCE BOOKS

The books listed for reference under General Science 1.

Either of the following books, though expensive, gives an up-to-date treatment of General Science for the senior high school:

Senior Science, Socialized for the High School: Bush, Ptacek and Kovats (Gage & Co.).

Man's Physical Universe: Bawden (Macmillan Co.).

GEOLOGY

INTRODUCTION.

"Never before has the average person had so wide an opportunity of coming into contact with the diverse aspects of nature as is afforded him to-day, through the use of the automobile. River valleys, gorges, waterfalls, divides, meandering brooks, cliffs, lake shores, waves, tidal marshes, mountain peaks, and mountain parks; each and every topographic phenomenon has for most people a degree of significance it never had before."—Introduction, *New Physical Geography*.

A study of the geology of Canada is necessary to throw light upon its physical geography. Geologists have been also geographers, for they have been compelled to explore and map a great wilderness, in order to study and record its geology. A gradual evolution has brought our lands to the present extent and form, and an equally prolonged development has given the present population of plants and animals, and has set man himself to take advantage of the vast resources of this northern half of the continent.

Geology 1.

The purpose of this course is not to make geologists of the students, but to develop powers to observe those things that lie at their very feet, and to help them to interpret those things, as signs of one of the newest parts of the earth, against the geological history of the earth.

Teachers must make a common-sense interpretation of this outline and avoid a too intensive treatment of the content. While a body of factual knowledge is desirable, teachers should strive for understanding and appreciation of the forces of nature that surround us, and of the vast changes that have taken place, and are continuing to take place, in our earth.

No textbook to be purchased by the student has been authorized by the Department of Education. Surround the student, if possible, with good reference books and periodicals, such as *The National Geographic Magazine* and *The Canadian Geographic Magazine*, and allow him to receive the joy that comes from discovery; and to partake of the search, organization, and understanding that must accompany research work. Have the students make collections of specimens and pictures for illustrative purposes. Field excursions, properly organized and conducted, should be made frequently.

New Physical Geography, by Tarr and von Engel (Macmillan Company), was used extensively when the Course was outlined, and should be made available to the students as a reference work. *The Ontario High School Physical Geography*, by Gilbert and Brigham (Macmillan Company, 1921), once used in Alberta as a textbook, contains much useful information, in that the back-

ground is Canada. The Chapter on The Geological History of Canada is very helpful.

N.B.—This outline is purely tentative, and is subject to revision. Teachers may select from it as much material as their classes can cover in a year's work. Emphasis should be placed on the geology of Alberta.

REPORTS FROM THE UNIVERSITY OF ALBERTA AVAILABLE TO TEACHERS OF GEOLOGY

The list of reports recommended to teachers of Geology and set forth on page 60 of the "High School Regulations, for the year 1937-38, has now been revised. Teachers are asked to disregard the old list and refer to the list following, all the items of which, save the last, are to be had from the **Department of Geology, University of Alberta (not from the School-book Branch).**

Reports—Geological Survey Division

- No. 1 (1919) pp. 104—A summary of information with regard to the mineral resources of Alberta, by J. A. Allan. **Price 35 cents.**
 - No. 2 (1920) pp. 138 & 14. Supplements the information contained in Report No. 1, by J. A. Allan. **Price 50 cents.**
 - No. 11 (1924); Geology of the Foothills Belt Between McLeod and Athabaska Rivers, Alberta; R. L. Rutherford; pp. 61 and 8-colour map (Serial No. 7). One inch to two miles. Continuation of the area described in Report No. 9. **Price 50 cents.**
 - No. 15 (1926); Geology of the Area Between Athabaska and Embarras Rivers, Alberta, by R. L. Rutherford; pp. 29 and 3-colour map (Serial No. 11). One inch to two miles. Eastward extension of field survey described in Report No. 11. **Price 50 cents.**
 - No. 17 (1927); Geology along Bow River between Cochrane and Kananaskis, Alberta, by R. L. Rutherford, pp. 46 and 9-colour map (Serial No. 12). Scale 1 inch to 1 mile. **Price 75 cents, or map alone, 25 cents.**
 - No. 19 (1928); Geology of the Area between North Saskatchewan and McLeod Rivers, Alberta, by R. L. Rutherford; pp. 37 and 3-colour map (Serial No. 13). Scale 1 inch to 3 miles. **Price 25 cents.**
 - No. 21 (1930); Geology and Water Resources in Parts of Peace River and Grande Prairie Districts, Alberta, by R. L. Rutherford; pp. 80 and 6-colour map (Serial No. 14). Scale 1 inch to 4 miles. **Price 75 cents.**
- Black and white geological map of Alberta, **Price 5 cents.**
- Map No. 16 (1937); Geological Map of Alberta, by J. A. Allan. In 14 colours. Scale one inch to 16 miles. **Price 75 cents.**

This map is distributed by the Department of Lands and Mines.
Edmonton

REFERENCE BOOKS.

- Tarr and von Engel: *New Physical Geography* (The Macmillan Company).
 Cornish and Whyte: *Ontario High School Physical Geography* (1923) (The Ryerson Press).
 Allen and Ferguson: *Elementary Science* (The Ryerson Press). Chapters III, V, VI, IX, X, XVI, XXIII.
 Coleman and Parks: *Elementary Geology* (Dent & Sons).

I.—GENERAL FEATURES OF THE EARTH.

The earth's present surface is the result of two opposing forces: (1) those tending to build it up; and (2) those tending to wear it down. Earthquakes, volcanoes, and crustal movements tend to build the earth's surface up above the sea level. Rain, rivers, frost, waves, and winds tend, in general, to wear down the surface. In the following outline the teacher is asked to lay particular stress on the way in which each factor listed has a definite place in the operation of these physical forces.

A.—The Gaseous Envelope or Atmosphere.

Very briefly review the following:

1. Composition and function of air.
2. Weight and height of the atmosphere.
3. Humidity of the air.
4. Rain and snow—
 - (a) Measuring rainfall.
 - (b) Ratio between rainfall and evaporation.
5. Temperature of the atmosphere—
 - (a) Sources of heat in the atmosphere.
 - (b) Modes of warming and cooling—
 - (1) Radiant energy: (a) passage of radiant energy; transparent and diathermanous substances; (b) radiation from the earth; compare soil, water, and rock as radiators; (c) reflection and absorption of heat.
 - (2) Conduction: (a) compare water, air, ground, and iron as conductors of heat; (b) warming of soil and bodies of water.
 - (3) Convection: (a) nature of convection currents in (i) air; (ii) water; (b) chief originating cause of winds; heat from the sun; (c) insulation; dead air spaces.
 - (c) Causes for differences in temperatures of the earth—
 - (1) Position of the sun in the heavens: (a) from morning to night; (b) from season to season; (c) from place to place.

- (2) Altitude.
- (3) Nature of the soil; warm and cold soils.
- (4) Exposure; north slopes, and sunny south slopes; hilltops and valleys.
- (5) Influence of bodies of water.
- (6) Nature and direction of the wind.
- (d) The mapping of temperature; isotherms.

B.—The Liquid Ocean, or Hydrosphere.

1. Importance of the ocean to mankind.
2. Oceanography—
 - (a) Instruments used in exploring the oceans—
 - (1) Hayes sonic apparatus, for depth.
 - (2) Deep-sea dredge, or trawl, for obtaining sea-life.
 - (3) Water bottle, and thermometer.
3. Ocean basins; the sea-floor—
 - (a) Nature of the sea-floor.
 - (b) Deposits on the ocean bottom—
 - (1) Rock fragments.
 - (2) Ocean-bottom oozes; globigerina ooze; diatom ooze; radiolaria; pteropod ooze.
 - (3) Red clay:—composition; decomposed volcanic dust and shell remnants.
 - (c) Continental shelf, and continental slope.
 - (d) The ocean water—
 - (1) Composition of sea water.
 - (2) Density and pressure of sea water.
 - (3) Temperature of the ocean.
 - (e) Movements of the ocean waters—
 - (1) Wind waves: (a) nature of wind waves; energy and form move forward; (b) rollers, or ground swell; (c) surf, or breakers; (d) undertow.
 - (2) Other waves:—earthquake waves; iceberg waves; hurricane waves.
 - (3) Tides: (a) cause of tides; (b) high tide, and low tide; spring tides, and neap tides; (c) tide-tables; (d) tidal wave, or “bore”; (e) tidal currents—
 - (i) drift sediment about, helping to form sedimentary strata; (ii) produce a circulation in harbours, helping to remove sewage, filth, etc.; (iii) aid or impede navigation.
 - (4) Ocean currents: (a) causes of surface currents—
 - (i) difference in temperature of ocean water; (ii) wind-drift current; (b) principal ocean currents: Equatorial Drift; Sargasso Sea; Gulf Stream;

North Atlantic Eddy; West Wind Drift; Pacific Eddies; Japan Current; Labrador Current.

- (5) Effects of ocean currents: (a) on climate; (b) aid or retard vessels; (c) cause fogs; (d) drifting sea ice, and icebergs; (e) bring oxygen and food for many sea animals.
- (6) Ice in the ocean: (a) Arctic sea icebergs and floes drift southward in the Labrador Current; (b) icebergs from the Greenland Ice Sheet drift into the Arctic, and from the Great Ice Barrier into the Antarctic.

(f) Coral reefs:—fringing reefs; barrier reefs; atolls.

C.—The Solid Rock Crust, or Lithosphere.

1. Man has learned many facts about the lithosphere from mountains, rivers, valleys, tunnels, quarries, mines, and well borings.
2. Nature of the lithosphere—
 - (a) Mantle rock (soil mantle), and bed rock.
 - (b) Rocks of the crust—
 - (1) Sedimentary rocks: (a) assorting action of waves and currents; (b) binding by mineral cements, and by pressure; (c) examples to be studied:—sandstones; shales; limestones; conglomerate; chemically formed rocks, as salt, gypsum, stalactite; organic rocks, as most limestones, coal (bituminous, lignite, peat).
 - (2) Igneous rocks: (a) origin of such rocks: (i) igneous rocks of the surface; (ii) intruded igneous rock—dike, sheet or sill, bosses, batholiths; (b) examples to be studied:—granite, diabase, and basalt.
 - (3) Metamorphic rocks: (a) origin of such rocks:—(i) quartzite—altered sandstones; (ii) slate—altered clay rock; (iii) marble—altered limestone; (iv) anthracite—altered coal; (v) schist—altered from various rocks; (vi) gneiss—altered from various rocks; (b) study samples of the above rocks.
 - (c) Resistance of rocks—
 - (1) Durable rocks; hills, ridges, peaks,—mainly sandstone, quartzite, and granite.
 - (2) Weak rocks; valleys formed,—limestone, marble.
 - (3) Agents of weathering:—percolating water, air, and the action of animals and plants.
 - (4) Rate of weathering; varies with the rock, climate, exposure, and steepness of slope.
 - (5) Results of weathering; residual soil; transported soil; dissolved mineral substances; talus; land-

slides; soil creep; formation of sedimentary strata; valley broadening; rock sculpturing.

- (6) Agents of erosion:—wind; rivers; oceans; lakes; glaciers.
- (7) Denudation; tends to lower the land, opposed to frequent uplifts.
- (8) Illustrate by such studies as the Cypress Hills formation; the Selkirk Range, in British Columbia.

II.—RIVERS, VALLEYS, LAKES, AND SWAMPS.

A.—Supply of Water:—underground supply; run-off; variation in run-off; perennial flow; regulation of river volume; floods.

B.—Meaning of the following terms:—gorge; ravine; gully; canyon; gulch; glen; dale; dell.

C.—Divides and Valleys—

- 1. Divides separating river systems.
- 2. Subordinate divides between different branches of the same system.
- 3. Meaning of term “watershed”.
- 4. “Streams carve the depressions along which they flow”. Rain sculpture; the bad lands.
- 5. Erosive action of rivers—
 - (a) Degrading and aggrading of valleys.
 - (b) Pot-holes; swift-flowing streams.
- 6. Waterfalls and rapids.
 - (a) A degrading stream flows from strong to weak rocks; Niagara.
 - (b) Rapids; formed over dipping surface of durable rock.
 - (c) Joint-plane falls.
- 7. Young, mature, and old valleys.
- 8. River flood plains.
- 9. River terraces.
- 10. Deltas.
- 11. Alluvial fans.
- 12. Imperfect development of drainage—
 - (a) Lake basins formed by some interference with drainage; glacial invasion, volcanic craters, ox-bow lakes, alluvial cones, landslides, lava floods.
 - (b) Most lakes are long because they occupy parts of river valleys.
 - (c) Deltas tend to make lakes irregular; waves tend to straighten the shores.
 - (d) Salt lakes:—Caspian Sea, Dead Sea, Great Salt Lake. Cause:—source of salt, failure to overflow, increasing saltiness.

- (e) Life history of lakes:—swamps caused during filling of lakes; peat bogs, lake swamps, lake shore swamps, tundra swamps, river swamps, arid land swamps.

III.—PLAINS, PLATEAUS, AND DESERTS.

1. Marine and coastal plains.
2. Lake plains: (1) the Red River Valley plains; (2) the Great Lake plains.
3. River plains.
4. Prairie plains; the three prairie levels.
5. Origin and nature of a plateau.
6. Life history of a plateau; gorges, canyons, mesas, and buttes.
7. Nature of deserts.
8. Wind action on deserts; sand dunes, sand storms.

IV.—MOUNTAINS.

1. Names applied to units of mountain form:—range, system, cordillera, ridge, peak, interior basin, park, water gap, wind gap, pass.
2. Cause of mountains.
3. Life history of mountains:—young, mature, and old mountains.
4. Brief study of the structure of the Rocky Mountains—
 - (a) Deposition period:—great depth of sediment, approximately 50,000 feet.
 - (b) Uplift period:—beginning of Tertiary.
 - (c) Erosion period:—includes glaciation.
5. Mineral products of mountain regions.

V.—VOLCANOES, EARTHQUAKES, AND HOT SPRINGS.

1. Life History of a volcano.
2. Earthquakes—
 - (a) Cause; characteristics; effects.
 - (b) Recording and locating earthquakes.
3. Hot springs; Banff springs; mineral deposits at surface.

VI.—GLACIERS AND THE GLACIAL PERIOD.

1. Mountain valley glaciers:—formation; movement; glacial erosion; moraines—lateral, medial, and terminal; outwash deposit; source of water, of sediment; rock flour; nature of deposit.
2. Continental glacier, or ice sheet (the Greenland Ice Sheet): extent; movement; ice-cap: rock material—on the surface, at the base; deposits at the margin; icebergs—causes, effects.

3. Surface forms due to glaciers:—kames; eskers; drumlins; rounded and fluted hills; U-troughs; giant kettles; lake basins.
4. The glacial period—
 - (a) Evidence of a glacial period in Canada, and in Alberta in particular.
 - (b) Effects of this ice sheet: (1) on the land surface; (2) on soil; (3) on streams; (4) on lakes.
 - (c) Meaning of the following terms:—drift; till, or boulder clay; glacial scratches.

VII.—ECONOMIC GEOLOGY OF ALBERTA.

Alberta produces at present over 90 per cent. of the total petroleum production of Canada. Several large natural gas fields exist in the Province. There are more than 15,000 square miles of bituminous sands. At Fort McMurray there are valuable beds of salt. Other minerals are found, as gypsum, mica, talc, bentonite, copper, gold, silver, iridium, and iron. 1,500,000 horse-power is available in our water power, while only 72,000 horse-power has been developed. There are over 1,000,000 million tons in coal reserves, with an annual production of over 5,000,000 tons.

A *selection*, to be determined by local conditions and time available, is to be made of the following topics. Other topics may be substituted or included, at the discretion of the teacher.

1. A coal-bearing formation.
2. An oil-bearing formation.
3. Building stone.
4. Gravel beds.
5. Placer gold.
6. Water power in Alberta.
7. Other mineral deposits of Alberta.
8. Cores from wells; diamond drills.

Note.—Field work is so valuable that it should be included in every course in geology. The following are some of the phenomena that are likely to be found within easy reach of a school:

1. Illustrations of weathering:—cliffs, ledges, boulders, old stone or brick buildings.
2. Nature of country rock:—in river valleys, railway cuts, quarries. In such places, stratification, joint planes, folding and faulting, and fossils, may possibly be found.
3. The soil:—characteristics and depth; soil of rock decay, or transported soil; study its origin in some cut.
4. River transportation:—road gutters, ploughed fields, small wet-weather streams, railway cut. Nature of action; load carried; disposition of load; result of removal. Young stream

valleys; alluvial fans; deltas; waterfalls. The entire subject of river action and life history of valley may be built up around a field excursion to a near-by stream.

5. Shore lines:—lake shore, river bank, or shore of a pond. Action of waves; bars; wave-cut cliffs; small-stream deltas; shore swamps.
6. Glacial phenomena:—striae; till banks; scratched stones. Are pebbles or boulders foreign, i.e., unlike the country rock? Is till unstratified? Find cuts of stratified drift—evidence of water action. There may be moraines, kames, eskers, or drumlins.
7. Fossils:—gravel pits, quarries, coal-mines, bad lands, railway and road cuts, outcroppings. A study of fossils interprets the condition of the earth that developed a particular type.

Note.—As enrichment material, teachers who have both time and interest, *may* develop a unit on minerals.

Minerals are recognized by their physical and chemical properties; of these the more important are:

1. Composition:—elements present in the mineral.
2. Crystal shape.
3. Hardness:—ability of one mineral to scratch another. Scale: (1) talc (softest); (2) gypsum; (3) calcite; (4) fluorite; (5) apatite; (6) feldspar; (7) quartz; (8) topaz; (9) corundum; (10) diamond (hardest).
4. Streak:—colour of the powdered mineral.
5. Lustre:—metallic or non-metallic.
6. Cleavage.
7. Fusibility:—some minerals melt readily; others are nearly infusible.
8. Taste, smell, feel:—taste (salt); odour (arsenical pyrites); feel (graphite and clay).
9. Mineral deposits and veins:—how mineral deposits are worked.

GEOLOGICAL TABLE FOR ALBERTA.

Era.	System.	Group.	Formation.	Life Conditions.
CENOZOIC	Quaternary.	Recent.		Man assumes importance.
		Pleistocene.		Periodic glaciation. Great mammals, such as the mastodon, become extinct.
	Tertiary.	Pliocene.		Apthropoid apes appear.
		Miocene.	Hand Hills conglomerate.	Period of greatest mammals.
		Oligocene.		Modern mammals and birds develop.
		Eocene.	Paskapoo.	Ancient mammal types fade, and new ones come in.
MESOZOIC	Upper Cretaceous.	Montana.	Edmonton. Bearpaw. Belly River. Pierre.	Reptiles of great size and great variety. Plant material approximating tropical flora of to-day found as pertified wood (cinnamon).
		Colorado.	Benton.	
		Dakota.	Dakto (Blairmore).	
	Lower Cretaceous.	Kootenay.	Kootenay Coal Measures.	Flowering plants appear; ferns, cycads.
	Jurassic.		Ferne shale.	Time of toothed birds and flying reptiles.
	Triassic.		Shales.	Time of dinosaurs.
PALEOZOIC	Permian.		Upper Banff shale.	Time of amphibians.
	Carboniferous.	Mississippian.	Rocky Mountain quartzite. Upper Banff limestone.	Period of ancient sharks and crinoids.
		Pennsylvanian.	Lower Banff shale.	Rise of primitive reptiles and amphibians. Ancient coal-swamp floras.
	Devonian.		Limestones:—Lower Banff. Intermediate. Sawback.	Dominance of fishes, corals, and shelled animals.
	Silurian.		Halysites beds.	Rise of lung fishes and scorpions.
	Ordovician.		Graptolite shales. Goodsir shales.	Rise of shelled animals.
	Cambrian.	Upper Cambrian.	Ottertail limestone. Chancellor shales. Sherbrooke limestones. Paget limestones. Bosworth shales and limestone.	Dominance of trilobites.
		Middle Cambrian.	Eldon limestone. Stephen shale. Cathedral limestone.	
		Lower Cambrian.	Great White shale and limestone. St. Piran quartzite. Lake Louise shale. Fairview sandstone and conglomerate.	
	Pre-Cambrian.		Hector shale. Corral Creek sandstone.	Time of first invertebrates. (Note.—Conditions were such that evidence of organic life: (1) larval life, (2) dawn of unicellular life, before the Proterozoic Era has been obliterated.)
PROTEROZOIC				

PHYSICS 1.

The course is outlined here by reference to sections of the authorized textbook. The requirements of the course cannot, however, be satisfied by the mere exposition of the textbook. The course should be made practical by means of experiments and other classroom activities that will bring it into contact with the students' everyday experience.

Textbook: Elements of Physics for Canadian Schools: Merchant and Chant; revised by Lewis, Ainslie and Lang (1937)—Copp, Clark Company.

This is an enlarged and greatly improved edition of the *Ontario High School Physics* (Revised Edition) by Merchant and Chant.

In the following outline, references to the older book are made in parenthesis.

PART I.—INTRODUCTION: Chapters I-IV. (Chapter I.)

Apparatus.

Balance. Metric and English weights.

Metre sticks or rulers with inches and centimetres marked.

Litre can and gallon or quart can.

Measure various quantities—linear, area, volume.

Express the measurements taken in one system in terms of the units of the other system.

Determine density of bodies by weighing and measuring for volume.

Show importance of measurements—automobiles, bridges, railways, monetary exchange, etc.

PART II.—MECHANICS OF FLUIDS: Chapters V-XIV.

(Chapters X-XIV.)

Apparatus.

Balance. U-tubes. Rubber membrane. Thistle tubes. Equality of pressure syringe. Cylinder and socket for Archimedes' Principle. Overflow cans. Catch buckets. Specific gravity bottle. Demonstration hydrometer—weighted wood. Hydrometer tubes. Air pump. Rubber balloons. Glass tubing—rubber tubing. Inter-mittent siphon. Barometer tube—mercury—J-tube. Florence flask.

Chapters V and VI (Chapter X).

Show equality of pressure—Figs 19 or 20 (87 or 88).

Show pressure due to depth—Fig. 28 (95).

Chapter VII (Chapter XI).

Determine buoyant force—Figs. 35 and 36 (102 and 103).

Chapter VIII (Chapter XII).

Use several methods to determine density. The above apparatus is sufficient.

Note: If a specific gravity bottle is not available, the density of a liquid may be determined quite accurately with a narrow-necked bottle.

Chapters IX, X, XI and XII (Chapter XIII).

Experiments shown in Figs. 43, 45, 46, 52, 64 and 67 (110, 112, 113, 111, 124 and 125).

Chapters XIII and XIV (Chapter XIV).

Show the simpler applications of pumps and siphons.

PART III.—MECHANICS OF SOLIDS: Chapters XV-XXV.

(Chapters II-IX).

Apparatus.

Coin and card over glass. Apparatus as Fig. 109 (25). Collision balls. Any heavy body and thread—Fig. 111 (27). Metre sticks. Weights. A board. A block of wood. Pulleys.

Chapters XV and XVI (Chapter II).

Omit the more difficult calculations.

Chapter XVII (Chapter III).

Illustrate momentum—coin and card. Collision balls.

Illustrate inertia—heavy body and thread—Fig. 111 (27).

Illustrate independence of forces—Fig. 109 (25).

Chapter XVIII (Chapter IV).

Use metre sticks over a narrow edge and place weights to illustrate law of moments. Do not attempt composition of forces or Parallelogram Law.

Chapter XIX (Chapter V).

Compare gravity, cohesion and adhesion. Do not attempt calculations.

Chapter XX (Chapter VI).

Do not attempt Section 126 (54).

Use any heavy body supported by string. Then drop when string is slack and show how string breaks.

Bring out differences between potential and kinetic energy, and between energy and work.

Chapter XXI (Chapter VII).

Use a piece of board, a string and chalk to find C. of G. of board as in Fig. 126 (41). Show that board balances on C. of G.

Find C. of G. of metre stick with weights placed at different points.

Illustrate three states of equilibrium with an egg, a cone or any similar body.

Chapter XXII (Chapter VIII).

Use experiment of Fig. 138 (49).

Use a block of wood or a brick. Show that the coefficient is independent of the size of the surfaces in contact. Have block of wood slide in opposite directions and take average to allow for grain.

Show effect of lubricants.

Chapters XXIII, XXIV and XXV (Chapter IX).

Use a metre stick or any type of stick to illustrate the three types of levers and find their mechanical advantage.

Find the mechanical advantage of different combinations of pulleys.

Chapter XXV for reference.

PART IV.—SOME PROPERTIES OF MATTER:

Chapters XXVI-XXVIII (Chapters XV and XVI).

Apparatus.

Wide-mouthed bottles. Glass tubing. Rubber tubing. Thistle tube and membrane. Surface tension apparatus. Cohesion plates or pieces of lead. Capillary tubes and mercury. Bubble pipe. J-tube.

Show diffusion—gases where possible—any colored liquid in water—any colored solid which will dissolve in water.

Show osmosis—thistle tube and membrane, or use any type of dried fruit.

Show cohesion and adhesion—dip glass in water and in mercury. Show application of this in capillary tubes—apply to blotter, towel, water in soil, etc.

Use cohesion plates or pieces of lead.

Show surface tension. Use special apparatus or float a pin.

Blow bubbles. Show contraction forcing air out of pipe.

Account for spherical shape of bubbles and drops.

Pour water down the outside of a glass rod or wooden stick.

Show how hairs of a brush draw together when removed from a liquid.

Show how kinetic theory explains Boyle's Law.

Use J-tube to demonstrate Boyle's Law.

PART VI.—SOUND: Chapters XLIII-LII (Chapters XVII-XXI).

Apparatus.

A coil spring, or a rubber tube that is very flexible and elastic.

A mounted string—any string instrument, such as a violin or guitar, will do.

Two matched tuning forks mounted on sounding boxes.

An air pump and receiver and bell.

Mailing tubes, cardboard, water containers.

A simple rotating machine with perforated disk. See Fig. 322 (204).

Rods of wood, iron, etc.

Wave Motion.

Demonstrate transverse and longitudinal waves, using a spiral spring or rubber tube.

Show that energy is always transmitted from one end to the other.

Demonstrate nodes and loops by placing riders on a vibrating string. See Fig. 335 (212).

Illustrate wave length, amplitude and frequency.

Show that all waves can be reflected and refracted. Illustrate.

Explain the equation $v=nl$.

Show the different types of energy which are transmitted by wave motion.

Sound.

Show how sound is always produced by vibrating matter. Compare the motions of a vibrating rod producing a sound, the particles of air transmitting the wave, and the drum of the ear receiving the vibrations.

Show that a material medium is required for transmission—Fig. 304 (187).

Compare intensities of transmission through different media by placing the end of a wooden stick, an iron rod and a rubber tube to the ear and having someone strike or scratch the other end. Also illustrate by results with head under water, as compared with transmission in air.

Echoes.

Compare with reflection of water waves and reflection of light in a mirror.

Music and Noise.—See Figure 322 (204). Illustrate by difference in driving over a rough and on undulating road.

Limits of Audibility.—Illustrate by a rod with too low a frequency to hear but show that it produces ripples on surface of water.

Sympathetic Vibrations.—Use tuning forks of the same frequency on sounding boxes. Illustrate by a swing.

Resonance.—Use mailing tubes with one end in water. For open tube roll up a piece of cardboard, and telescope it into a mailing tube. Vibrate fork over end.

Forced Vibrations. Consonance. Vibrate fork and press against any rigid surface. Illustrate by sounding boards or boxes in musical instruments.

Determine pitch by siren. Figure 322 (204).

Musical Instruments.—In connection with all common musical instruments, have the students answer the following questions:

1. How is the sound produced?
2. How is the pitch determined?
3. How is the sound intensified?

PART VII.—LIGHT: Chapters LIII-LXV

(Chapters XXXI-XXXVIII).

Apparatus.

Pin-hole camera. A simple photometer. Plane mirrors. Concave mirrors. One convex lens. One concave lens. Two 60° prisms. Paper can be used for a screen. One or two glass tumblers. Candles to use as sources of light and as objects.

If a rotating machine is available, get a Newton's disk to rotate on it.

Get some glass of different colors and show how light is absorbed as the colors are superimposed one on the other.

Compare the transmission of sound and light.

Illustrate differences in velocity of transmission. (The steam from a locomotive whistle is seen before sound is heard, etc.)

Show the umbra and penumbra in the sun's shadow cast by a stick or a post.

Make a pin-hole camera from a cigar box. Use a piece of frosted glass at the back.

Distinguish between intensity of illumination and illuminating power. Illustrate by noting effect on eyes as one moves closer to a bright light.

Prove Law of Inverse Squares, using a photometer.

Test laws of reflection in a plane mirror.

Show regular and irregular reflection—any highly polished surface compared with a similar dull surface.

Place an object between plane mirrors inclined at different angles and note the images.

Place an object between parallel mirrors and note the images as viewed over the top of one mirror.

Find the principal focus of concave and convex mirrors and lenses.

Show the images when objects are placed in different positions in relation to both the mirrors and the lenses.

Show that the real image can be focussed on a screen, while the virtual image can not.

Draw diagrams to explain the formation of the images and to show how the eye sees them.

Illustrate refraction with water in a glass and with prisms.

Show total reflection and explain its application in binoculars, rainbow, etc.

Explain power in a lens and show how the convex lens is used for a magnifying glass.

Explain the correction for short-sightedness, and long-sightedness.

Show how the convex lens is used in both the camera and the projection lantern to secure a real image.

Produce a spectrum and recompose the colors.

Explain the difference in the process of mixing colors and mixing lights.

LANGUAGES

LATIN

Latin 1.

The course follows the prescribed textbook.

Textbook:—Thompson, Tracy & Dugit: *Essential Latin*, pages 1-250 (Clarke, Irwin & Company).

Latin 2.

Textbook:—Grammar: Thompson, Tracy & Dugit: *Essential Latin* (Clarke, Irwin & Company).

*Prose: Baker & Inglis: *Latin Prose Composition*, Part I (Macmillan Company).

Reading: Bonney & Niddrie: *Latin Prose and Poetry* (Ginn & Company).

The following selections are required:

Caesar—Sections 1-8 (inclusive).

Eutropius—All selections except No. 5.

Martial—All selections.

Ovid—Selection No. 6, "The Death of Icarus", and No. 8, "The Race".

Phaedrus—The following selections: Nos. 2, 3, 4, 5, 9 and 10.

Suggestions as to the Use of the Prose Text-book.

*The study of *Essential Latin* should be completed before a beginning is made with the Baker and Inglis *Latin Prose Composition*. It is not intended that the latter text-book should be covered chapter by chapter. A careful selection of sentences should be made from each of the chapters studied. The following major constructions should receive special attention:—

	Chapter
1. Direct and Indirect Questions.....	VII
2. Accusative and Infinitive (omit Chapter XXVII).....	XII
3. Purpose clauses	XV
4. Result clauses	XV
5. Substantive clauses of purpose and result.....	XVII
6. Gerund, Gerundive, Supine.....	XXI
7. Passive Periphrastic	XXVI
8. <i>Cum</i> Clauses	XXIII

The methods of handling Expressions of Time, Place, and Space may be illustrated by sentences from Chapters IV, V, and VIII.

Easy passages for sight translation.

GERMAN

German 1.

Textbook:—Chiles and Wiehr: *First Book in German* (Ginn & Company). Lessons 1-15, including review exercises.

Reading:—Hagboldt: *Fünf berühmte Märchen* (Copp Clark Co.).

Hagboldt: *Eulenspiegel und Münchhausen* (Copp Clark Co.).

Occasional practice in German script should be given.

German 2.

Textbook:—Chiles and Wiehr: *First Book in German* (Ginn & Co.). Lessons 16 to the end.

Reading:—Bauer: *Das Geheimniss des Jannshofs* (Heffer & Sons).

Kastner: *Emil und die Detective* (Bell & Sons).

Easy passages for sight translation.

ART

ART 1

INTRODUCTION.

This Course is intended for students of High School age who may elect Art as a subject; for those who need a knowledge of design to correlate with the Home Economics and General Shop Courses; and for those who intend to qualify for Normal Entrance.

It is based on the assumption that all men and women need a full understanding of what constitutes beauty in form and colour in the things that make up their ever-changing environment.

The aim of the Course is to develop in the mind of the student aesthetic standards by which to evaluate all works of art relating to the individual, the home, and the community, and to aid in releasing and directing his creative energy.

As design is the basis of all Art, the study of the underlying principles should lead to a finer aesthetic discrimination on the part of the student. Added to this, wide experience in the selection, adaptation, and creation of beautiful form and colour should develop good taste, appreciation, and power of artistic expression.

In this revised Course, a departure has been made from the former practice of assigning a stated number of exercises to be completed during the year. Instead, it is required that each teacher of the Course shall thoroughly acquaint himself with its object, details, and methods. Then, after having made himself thoroughly familiar with the subject, he can plan exercises in line with the ideas of the Course. This outline is purely suggestive and flexible, so that teachers will develop any phase in which they themselves, or their classes, are particularly interested. The teachers are urged to encourage individual interest and originality, and never to be afraid, if the chance offers, to step outside, or go a little beyond, what the Course offers.

Each student should take Art Structure, Drawing and Colour, and **any two** of the following:

- (a) Picture Analysis, or Appreciation of Applied Arts.
- (b) Illustration and Lettering.
- (c) Creative Design.
- (d) Craft Projects.
- (e) Interior Decoration.
- (f) Costume Design.

Since four periods per week have been allotted for class instruction in this subject, it is to be expected that considerable time will be spent outside of instruction time on the completion of problems. All problems in Design should be developed in the class. The application to Craft Projects may be worked at home and brought in from time to time to show progress. The collection of illustrations in the Appreciation of Applied Arts will be an out-of-class activity.

It is expected that each student will make some type of portfolio or container suitable to preserve all drawings and sketches. Rough sketches should be kept to show the development of ideas to the finished result.

Teachers will find helpful reference material in the following:

REFERENCE BOOKS.

Art Structure:

Dow: *Composition* (Doubleday, Page & Company).
Goldstein: *Art in Everday Life* (Macmillan Company).
Fenn: *Abstract Design* (Batsford).

Picture Analysis:

Littlejohn: *How to Enjoy Pictures* (A. & C. Black).
Helen Gardner: *Understanding the Arts* (Harcourt, Brace & Company).
Sir Martin Conway: *The Book of Art for Young People* (A. & C. Black).
C. C. Pearce: *Composition* (Batsford).
Good magazine illustrations, as in *Country Life*, *Arts and Decoration*, *The International Studio*.

Appreciation of the Applied Arts:

Gardner: *Art Through the Ages*.
The Illustrated London News.
Day Museum Prints (Reeves).

Craft Work:

F. J. Glass: *Artistic Practical Handicraft Series*.
Craft for All Series (Pitman Publishers).
Sower: *Everyday Art at School and Home* (Batsford).
D. C. Minter: *Modern Home Crafts* (Blackie).
Volume 2 of *Dryard Press Leaflets*.

Interior Decoration:

Jackway: *Principles of Interior Decoration* (Macmillan).
Todd and Mortimer: *The New Interior Decoration* (Batsford).

ART STRUCTURE.

Aims:

1. The application of the principles of design.
2. The filling of given areas with well-balanced form and colour.
3. The developing of line patterns and mass patterns.

Problems:

1. Make static and dynamic rhythm forms in self-contained areas (line patterns).
2. Make Notan patterns in self-contained areas, developed in charcoal, and completed in colour.

Note.—*Notan* is the term for contrast of value.

3. Make border repeats in alternations or series.
4. Make surface patterns, as for textile, or for end papers of a book.
 - (a) Subdivision of the surface by squares, bricks, diamonds, ogees, or circles.
 - (b) Placing of simple motifs within the resultant areas, or at intersections, or both.
 - (c) The working out of a value arrangement in not more than five steps in colour.
 - (d) "Patterning" surfaces as contrasted with flat colour.

DRAWING.

1. (a) Single objects in **line** (including third dimension), as packing-box, carton, fruit-basket, coal-oil can, nail-keg, tub. Line brush drawing may be used.
- (b) Single objects in **light and shade**, as vase forms, bottles, lamps, kitchen utensils. Charcoal, wash drawings, or dry brush may be used.
- (c) Groups of three or four objects, with emphasis on **composition** first, then the **drawing**, as (1) cones, cylinders, cubes; (2) manufactured objects.
2. Pose drawing:—20-minute sketches to be done at regular intervals throughout the year.

COLOUR.

Value scales in 7 or 9 steps.

Intensity scales in 7 or 9 steps.

Flat washes applied to drawing groups. (Compositions as in 1 (c) above.)

Application in the problems that follow.

ILLUSTRATION.

Historic events.

Stories from Literature.

Dramatic incidents in a play.

Imaginative Drawing.

This work will be an application of composition ideas gained from picture analysis, combined with pose, drawing, and color.

PEN LETTERING.

Letters in tone pattern and space filling.

Open-closed letters. (See *P's and Q's*, by Tannahil.)

Page arrangements.

Paragraphs in pen letters with initial letters and fillers.

CREATIVE DESIGN.

1. Clay, or soap, or *papier-mâché*.
2. Block prints, by use of potato-cuts or turnip-cuts.
3. Stencilling:—negatives developed and cut. Special care with ties and notan effects. Stippling or spraying of paint or dye on material.
4. Leather:—decorative pattern, with thonging and lining of article, as, book supports, book jackets, purse.

PICTURE ANALYSIS.

The idea of design can be strengthened if reproductions of pictures by old and modern masters are analyzed for their design qualities, as distinct from their representative, religious, moral, or anecdotal qualities. Students may practise such analysis in line and tone, reducing the form to an abstraction stripped almost entirely of its representative quality; and remembering that it is design that is being sought—the relationship between the parts, and no part for itself. Other methods of approach to picture analysis may be used, the object being to induce the student to look at the picture, to really see and enjoy its composition, and not merely to memorize facts about it or the life of the painter.

The following set of colored pictures of marked interest in design of line, mass, or tone, is required:

Daumier: *The Washerwoman*.

Vermeer: *Lady with Lute*, and *Young Lady with Water Jug*.

Monet: *Rocks of Belle Isle*, and *Fishing Boats*.

Velasquez: *Lady with Fan*, and *Surrender of Breda*.

Raphael: *The Ansidei Madonna*.

Millet: *The Gleaners*.

Titian: *Larinia*, and *The Tribute Money*.

Van Gogh: *Garden in Arles*.

Seurat: *Le Cirque*.

Renoir: *Girls at a Piano*.

Burne-Jones: *The Golden Stairs*.

Whistler: *Battersea Bridge*.

Other sources:

Good examples of photography.

Good magazine illustrations, as in *Country Life*; *Arts and Decoration*; *The International Studio*; *The Artist*.

When students are to be tested in appreciation of good composition, it is suggested that compositions other than those used in class-work be used, so that picture study becomes a stimulus to looking at pictures, and an exercise in judgment leading to appreciation of the art quality in pictures.

CRAFT PROJECTS.

"A finished model to give the greatest satisfaction must not only show good craftsmanship, but must be functionally fit, structurally sound, and artistically pleasing."

The students taking General Shop are expected to develop designs to be worked out as shop projects. A minimum of three designs is suggested for this section of the Course.

Suggested Problems in Woodwork:

Design for a gate-leg table, end-table, library table, radio case, piano bench, hall stand, writing desk, floor-lamp standard and shade, chip carving panels or borders.

Suggested Problems in Sheet-metal:

1. Design contours for bowls, cake plates, book ends, plaques.
2. Repoussé designs for plaques, medallions, trays, trophy-shields, ornaments, door-knockers.
3. Etched metal designs for ash-trays, desk sets, name-plates.
4. Saw-pierced designs for objects similar to those in (2) and (3).

Suggested Problems for Forging:

Designs for grill, hearth-fender, lamp bracket, business-sign, umbrella-stand, footstool.

Suggested Problems in Cement:

Panel design, garden ornament.

INTERIOR DECORATION.

1. Study of the materials used. Collect samples, and name typical floor coverings, wall coverings, drapery and curtain fabrics, upholstery materials.
2. Make floor plans (scale drawings) of the placing of furniture for balanced groups.

3. Discuss—

- (a) Scale of furniture for rooms of various sizes.
- (b) Ratio of patterned area to plain area.
- (c) Colour in relation to exposure.
- (d) Value in ceiling, walls, trim, and floor.

4. Make elevations of the same room as made in floor plan, showing furniture and wall arrangements in colour.

COSTUME DESIGN.

This work should be a follow-up to the costume design of the Intermediate School. Figures sketched in the pose drawing may be used as lay-figures. On these develop clothing drawings based on design principles.

Discuss the distinction between costume design and fashion drawing.

Study **line in dress**. Strong lines, graceful lines, weak lines. Line by contours, line by pattern in material, line by trimmings, line by construction. Make drawings illustrating the use of these. Collect illustrations showing weak line.

Discuss the effect of line correctly used to camouflage abnormalities. Draw clothing for short, slim type; tall, slender; short, stout; tall, angular; and tall, broad type.

APPRECIATION OF APPLIED ARTS.

This subdivision of the work is especially planned to correlate with Social Studies (Theme 5) and the General Shop Course.

Make collections of reproductions of examples. Mount these. This may be either a class collection, or individual collection. Class criticism. Stress fitness to purpose.

Suggested Topics:

Primitive Tribes:—tools, weapons, pottery utensils, articles of personal adornment.

Babylonian Arts.

Egyptian:—furniture, jewelry, buildings.

Greek—pottery, metal objects, architecture, sculpture.

Roman:—metal objects, glass (Pompeiiian), architecture, sculpture.

Byzantine:—mosaics, dress.

Medieval:—manuscripts. *Book of Kells*. Objects in gold and silver.

Renaissance:—ancient art, revived architecture, bronze sculpture.

ART 2.

Art 2 should be attempted *only* in schools having the necessary supplies, equipment and reference material; and *only* by teachers who have had advanced training in Art and present-day methods of Art instruction.

Any *four* of the following *six* units will make a year's work:

I. PERIOD STUDIES OF PAINTING AND SCULPTURE.

The study of Painting and Sculpture from prehistoric times to the Twentieth Century.

Periods: Prehistoric painting, including that of the Indians of North and South America. Mesopotamian Art; early Aegean Art; Greek and Roman decoration, figure-painting and sculpture. Byzantine mosaics and painting; Romanesque and Gothic painting. (If time permits. Flemish, German, Spanish, Dutch, English, American and modern painting.)

Description of the use of various media: wax, fresco, egg, oil, water-colour.

Reference: *Illustrated Handbook of Art History* (Macmillan Co.).

See also Theme 4 under Social Studies 1.

II. CREATIVE DESIGN.

Carry out work in *lacquer, oil, or water colour. Size or tempera* for the decoration of walls, furniture, boxes, etc. Block printing for fabrics. In this section, animal, bird, figure, insect and landscape forms should be practiced with brush. The study of rhythm and harmony in line and mass. Shape-filling and various treatments of units.

Reference: *Creative Design*: Adolfo Best (Maugard).

III. ILLUSTRATION.

Block prints for end paper, using the various constructions. Interchange and counterchange stripe, ogee, brick, spot and sprig, diamond, square and rectangular half-drops. Units used should be connected with the story. Pen decoration for frontispiece and page illustrations. Wash drawing and body colour.

References:

Drawing for Art Students: Seaby.

Pen Drawing: Ellwood.

Reference Books on Dürer, Viege, Daumier.

IV. LETTERING.

Pen writing (Johnston type); and Roman and Modern Egyptian.

Gesso work—lampshade making; *papier mâché*; lino and wood printing, using colour.

V. STILL LIFE DRAWING, PAINTING AND COMPOSITION.

(a) *Freehand Perspective.*

Principles of perspective should be given for students interested in pictorial design.

Composing of groups (various eye-levels).

Drawing of interiors, furniture, open doors, windows, curtains and other hanging draperies. Charcoal and wash, pen and brush.

(b) *Plant Form and Tree Form* (Nature Drawing).

The study of growth, tangential junction, flower construction. Pencil or brush, using local flowers and other plant life.

(c) *The Uses of Interchange* in Composition of Landscape.

(d) *Figure.*

Construction—action poses; proportion.

Composition—memory drawings of running, jumping, digging, riding, pushing, swinging etc. Games and work. Built up from simple block or line forms.

VI. INTERIOR DECORATION.

Arrangement—proportion; uniformity; functionalism.

Various methods of treating painted surfaces; stipple and broken grounds; painted decoration. Some decoration carried out full size.

Students should be encouraged to make their own studies from nature, using ideas obtained from their surroundings. Figures they use should be people with whom they associate.

References: See List for Art 1.

DRAMATICS

DRAMATICS 1

INTRODUCTION

The Grade IX course in Dramatics should be reviewed, intensified and further developed in Grade X. The plays chosen for production should be more difficult than the Grade IX plays.

The course should be based on the project method; that is, the production of a programme of plays. The chronological outline of the course should be very loose, in order to give the teacher freedom in shaping the course to particular needs or inclinations.

With the plays comes practice in the various theatre arts,—settings, costume, lighting, make-up and the making of properties. The occasional period can be taken to recapitulate the knowledge thus gained, a small amount of theory going hand in hand with practice. The class may study either a group of one-act plays or a full-length play; with large classes, short plays may be used with duplicate casts; smaller classes may study a full-length play. Exercises in Voice Production and Body Control will be required from time to time.

At convenient times during the course, the pupils could report on plays they have read or seen, including moving pictures. Such reports could sometimes be given orally, and correlated with Voice Production, although too much emphasis should not be placed on this aspect of the work.

The testing of the pupils' work should relate to the following:— (1) neatly kept scrap-books; (2) definite improvement in Speech, as evidenced by interpretative reading, sight reading of a prose passage, participation in a play, oral report on some phase of the year's work; (3) a carefully organized actor's or director's script; (4) the floor plan for a play; (5) active participation in a play, as actor, *and*, in some capacity, backstage—lighting, costuming, make-up, stage designing, directing, prompting. These objectives are flexible enough to set up definite standards of achievement, and to grade the pupils.

1. VOICE AND DICTION:

Review the work of the Intermediate School.

Do not emphasize further study of this work, but give continuous drill throughout the year.

REFERENCES: *Voice and Speech Problems*: Raubicheck, Davis and Carll.

2. APPRECIATION:

Reading and discussion of one-act plays by teacher and class. Parts can be distributed and interchanged so that all pupils may have the opportunity to read. This can be done at the beginning of the term, or at intervals throughout the year.

REFERENCES: *The Stage and the School*: Ommanney.
Short Plays: Knickerbocker.

3. SCRAP-BOOKS:

Part of the course should consist in the preparation of a scrap-book containing material on the history of costumes in definite periods, on furniture, modes of hairdressing, types of physiognomy, etc. This will be the student's work-book, and will be open to inspection.

They may keep a bulletin board on which will be posted any dramatic or literary news of interest.

- (1) *First method*: Encourage each pupil to keep a scrap-book for himself. This method becomes difficult in a large class.
- (2) *Second method*: Have only a class scrap-book, to which each pupil will try to contribute.
- (3) The scrap-book may be of the ordinary kind, into which the material is pasted; *or*
It may be a collection of "mounts." The latter type of book is constructed in the following way. Let all the pupils mount their contributions (articles, sketches, illustrations of costume, etc.) on pieces of stiff paper, all of the same size. These may be set up for inspection or reference, and later tied or bound together to form the scrap-book, and at the end of the term the pupils may take their mounts away if they wish.

REFERENCE: *The Stage and the School*: Ommanney.

4. ACTING:

Review the work in Pantomime as outlined in the Intermediate School Programme of Studies, and extend the work to include characterization (vocal and pantomimic).

The teacher may deal with Direction as a separate department of endeavour, or as a part of the work in the production of plays for the express purpose of giving training in Direction. This is just a matter of choice between the Discussion and the Project Methods. Although the Project Method is to be preferred, some teachers may prefer to use both.

- (1) Analysis of the play—type, mood, characterization, tempo, plot development, theme.
- (2) Planning the general action of the play, and as much of the "business" as possible. It is necessary to have the general action planned beforehand, and all action, business, etc., written into the MSS. Much of this may have to be changed

when the play goes into rehearsal, but a director must have a plan before he begins on the pupils.

- (3) Casting: For school-room production the teacher may cast against type, but for public production casting to type is a safer plan.
- (4) Reading the play aloud. Let no error be established. Some directors have several readings of the play before actual rehearsal begins, but this method is apt to bore young people.
- (5) In the first few rehearsals pupils should retain their MSS. In fact, they should read the lines until they know the general routine movement and quite a bit of the business.
- (6) Memorizing lines. This should begin as soon as the pupils know the movement. Insist upon exactness at first; it is quite as easy to memorize the exact words as others substituted by the pupil. As the play progresses, some pupils will slip in the odd error. If it fits in all right, let it go. They must always have the cues right.
- (7) Rehearsal for continuity. When the cast know their stage movement and most of the business, and the lines pretty well, let them go through the play from first to last, with no directing whatever. Both cast and director will get a good idea of just where polish is needed most, and where the time should be quickened or slowed, etc.
- (8) Rehearsals for polish. Towards the end, bring in someone to be a sort of advance audience. This guest will have the effect of putting "pep" into the cast.

REFERENCES:

The Art of Play Production: John Dolman, Jr.
General Principles of Play Direction: Brown and Garwood.
The Stage and the School: Ommanney.
The Players' Handbook: Selden.
Drama and Dramatics: Fish.
Amateur Acting and Play Production: Wayne Campbell.

5. SETTING:

For the discussion of principles involved in stage setting, use several plays, including the ones studied and some new ones.

The perfect set should form an appropriate background for the mood of the play, and should satisfy the eye of the spectator.

Study illustrations of exterior and interior settings. Pupils should be encouraged to collect illustrations for themselves.

- (1) Show the significance of the straight and the curved line.
- (2) Show what is accomplished by a variety of playing levels.
- (3) Study the placing of entrances and exits, and of windows, alcoves, doors, etc.
- (4) The use of elements such as steps, pillar pieces, etc.

- (5) Colour in sets. (The background should be kept neutral.)
- (6) The placing of furniture.
- (7) The pupils should be required to design one or two sets. They should design the best sets possible and then adapt them to the limitations of their own stage. The designs should be as simple as possible, but nevertheless have some beauty.

It is possible to teach the pupils the actual construction of flats, etc., if time allows. They would perhaps be interested in designing and making the set for the final play.

The construction of a miniature stage may be one of the class activities; but only when the stage is related to a play actually in the course of production by the class.

REFERENCES:

Amateur Acting and Play Production: Wayne Campbell.

Scenery Simplified: Webster and Wetzell.

Modern Theatre Practice: Heffner, Selden and Sellman.

6. MAKE-UP:

Make-up will probably have to be limited to demonstrations by the teacher, but if the expense can be borne, the pupils should try their hand at it.

See that the pupils have a good understanding of straight juvenile make-up.

REFERENCE: *Time to Make-up*: Whorf.

7. COSTUME:

One of the plays studied should be a costume play, for which the pupils will design the costumes. In some schools it may be possible for the pupils to make the actual costumes or to make them in miniature for dolls.

N.B.—No more work should be attempted than is required for the play or plays actually produced.

REFERENCES: *Stage Costuming*: Agnes Brooks Young.

8. LIGHTING:

- (1) Explain the purpose of lighting.
- (2) Emphasize effects rather than equipment; demonstrations rather than construction. However, as in other sections of the work, if time, resources and situation allow, pupils should be encouraged to make lighting equipment.
- (3) Plan the lighting for one or two plays.

N.B.—No more work should be attempted than is required for the play or plays actually produced.

REFERENCE:

Modern Theatre Practice: Heffner, Selden and Sellman.

A Method of Lighting the Stage: McCandless.

9. STAGE PROPERTIES:

The classes should engage in the making of properties for plays under production or for plays whose production is anticipated for other years or by other groups. This work offers opportunity for activity to pupils not particularly interested or talented in acting and directing. As a matter of fact, in large classes, there is no reason why there should not be some specialization; some pupils working chiefly at stagecraft while others find their greatest activity in acting or directing.

Making of stage properties involves work in wood, clay, *papier mâché*, plaster, metals, cloth, etc. It covers the making of any furniture, decorations, and costume accessories that might be needed for the performance of a play.

REFERENCE: *Small Stage Properties and Furniture*: N. Cookson.

10. EVALUATION OF FILM AND RADIO PLAYS:

All high school students, whether or not they study dramatics, see plays in the moving pictures, or hear them on the radio. The dramatics class gives the teacher an opportunity to help students develop a *critical attitude* towards current film or radio productions.

The pupil should learn how properly to evaluate motion pictures, to distinguish between good and worthless films, and to know why this distinction exists. To a certain extent, films may be criticized in the same manner as stage plays,—for plot structure, characterization, dialogue, settings, and so on; but, beyond this, the pupil should evaluate those factors peculiar to motion pictures; such as camera angles and continuity.

Pupils may give oral or written reports on motion pictures seen at their leisure. It would be better, however, to have class discussion the day following a group attendance at a film. As many films as desired, up to the number of seven, could be discussed in this manner.

The motion picture exerts an important influence on the student's outlook. It is time the student, as a result of careful guidance, uses such discriminating taste that he will exert an important influence on the quality of motion pictures offered for his entertainment. If this can be achieved there will be a great forward step in raising the quality of cinema fare.

SUGGESTED ACTIVITIES

In addition to the activities mentioned in various sections above, the following are suggested:

1. Choral recitations.
2. Character monologues and sketches.
3. Oral and written reviews of plays read.
4. Presentation by individuals and groups of prepared pantomimic characterizations.

5. Group improvisations.
6. The construction of model settings from original designs for specific plays.
7. Original designs for settings sketched in colour.
8. Make-up clubs practising with their own equipment outside school.
9. Scrapbook collections of historical costumes, national costumes, uniforms (historical and national).
10. Designing of costumes in colours.
11. Making of costumes from original designs, either for full-sized figures or for dolls.
12. The making of simple floodlights, spotlights, border strips, footlights, dimmers and switchboards.

RECOMMENDED TEXTBOOKS OF PLAYS:

Short Plays: Knickerbocker.

BOOKS FOR THE REFERENCE LIBRARY.

The reference books listed under Dramatics in the Programme of Studies for the Intermediate School.

The General Principles of Play Direction: Brown and Garwood.

Scenery Simplified: Webster and Wetzel.

Modern Theatre Practice (Text Edition): Heffner, Selden and Sellman.

Time to Make-up: Whorf.

Small Stage Properties and Furniture: N. Cookson.

A Method for Lighting the Stage: McCandless.

DRAMATICS 2.

(N.B.—Dramatics 1 is a prerequisite to Dramatics 2.)

1. HISTORY OF THE DRAMA:

A survey of Drama from the time of the Greeks, including the rise of the Mystery Play, Morality Play, and Interlude; the first real plays; Shakespeare and his contemporaries; Ibsen and the Moderns; trends of our own times.

This will involve a survey of the development of the stage and the history of costume.

Activities: If reference books are available, the students can collect their own material and build up their own survey, the teacher acting as a guide. There should be reading of plays to illustrate the different dramatic periods, and phases of the drama. Students may make model stages and costume plates for specific plays.

2. PLAY-WRITING:

By this the students should learn something of the problems of plot advancement and characterization through dialogue and the development of conflict, suspense, and climax.

Activities:

- (a) Outline plots, using newspaper clippings for suggestions.
- (b) Discuss reasons for writing plays, such as depicting interesting people, settings, plots, or presenting ideals or propaganda. Modern "Plays of Protest", such as *Bury the Dead* or *Waiting for Lefty* will make valuable matter for discussion.
- (c) Write brief dialogues in which there is some plot advancement and characterization.
- (d) Dramatize well known stories in History and Literature.
- (e) Write a one-act play suitable for class production. Select a setting you know; visualize your characters and situations; state your theme and write a synopsis of your plot before you begin the play.

Present the best of the dramatizations and plays as class enterprises.

3. COSTUMING:

As the history of costume has already been covered under Dramatics 1, this part of the work should deal with the theory of line and colour. The importance of harmonious and correct costuming should be stressed.

The following principles should be learned:

- (a) The line or silhouette must characterize the individual, establish the historical period, form a part of the stage design and psychologically create the proper feeling in the actor and the audience.
- (b) The colours, which must be tried out under stage lights, create the atmosphere of personality and blend into the stage design.
- (c) The general effect of the complete costume is more important than finish and detail.

Activities:

- (a) Dress dolls to illustrate principles and periods.
- (b) Make a model costume plate to illustrate the principles of costuming a play, using analogous colours for harmonious groups of characters and complementary colours for opposing groups.
- (c) If the students have already made costume plates in connection with Section 1, they need not make others.

4. STAGE DESIGN:

Discuss the principles of stage design. The principles of colour are much the same as those for costume. In the matter of line, tragedy and dignity are shown by straight lines; comedy, by short curves; excitement by jagged lines.

Discuss realism in stage design; also symbolism, and stylization.

Activities:

- (a) Plan line and colour schemes for plays read.
- (b) Design and make model set for some play discussed in Section 1, or produced in Section 2.

5. STUDY OF THE THREE-ACT PLAY:

Discuss how it resembles and how it differs from the One-Act play.

Read at least one Three-Act play in class for general discussion and illustration.

Activities:

Have students make reports of Three-Act plays read, or seen on the stage, giving setting, synopsis of plot, theme, and personal criticism.

6. PLAY PRODUCTION:

The class may confine itself to One-Act plays, original or otherwise, or it may be ambitious enough to attempt a Three-Act play. In either case, there must be a review and extension of the study of the rules for acting, directing, lighting, and make-up, all of which have already been studied in Dramatics 1.

For classes that may wish to produce a Three-Act play, the following plays are recommended. They have all been produced successfully by High School students.

The Late Christopher Bean, by Sidney Howard. (This is the American version. There is an English one which some may prefer.)

The Taming of the Shrew, by Shakespeare. ("Acting" editions are procurable. In these editions the play is cut and adapted for easy production.)

Arms and the Man, by Bernard Shaw.

One Hundred Years Old, by the Quintero Brothers.

The Perfect Alibi, by Milne.

Prunella, by Barker and Housman.

She Stoops to Conquer, by Goldsmith.

RECOMMENDED TEXTBOOK OF PLAYS:

Short Plays: Knickerbocker.

N.B.—There is a danger of making Dramatics 2 merely a lecture course. Such it must not be. Enough practical work is suggested to give students a great deal of activity.

BOOKS FOR THE REFERENCE LIBRARY:

The Theatre: Shelden Cheney.

The Craftsmanship of the One-Act Play: Percival Wilde.

First Principles of Speech Training: Avery, Dorsey and Sickels.

Introduction to Drama: Hubbell and Beaty.

The Old Drama and the New: William Archer.

Historical Costume for the Stage: Lucy Barton.

A Method of Lighting the Stage: McCandless (Theatre Arts Pub. Co.).

MUSIC

GENERAL STATEMENT.

The aims of the High School Music Course are three:—to deepen the student's love of good music; to enable him to better understand what he hears or performs; and to develop his performing technique.

The effects upon the student in the pursuit of these aims may be listed as follows:

- (a) Increasing appreciation and understanding of good music.
- (b) Widening his experience of the art.
- (c) Acquiring the habit of concentration upon musical values.
- (d) Discovering to the student the kind and strength of his musical interests and aptitudes.
- (e) Providing an avenue for the furtherance of his social co-operation.
- (f) A general refining influence.
- (g) Developing technique in performance.

A fully rounded-out Music Course for High Schools includes the following departments of musical activity and study:

- 1. Chorus Singing.
- 2. Elementary Theory.
- 3. Ear-training and Sight-singing.
- 4. Music Appreciation.
- 5. Harmony.
- 6. Orchestra (or Band).
- 7. Glee Club.

Chorus singing is the basic musical activity in any school Music Course. It requires careful management in the assignment of voices to parts; in the choice of material as related to physiological as well as psychological maturity and technical ability of the student; also in the purpose underlying the plan of procedure. Success should not be measured in proportion to the physical exhilaration manifested in singing, but the work should be viewed from the standpoint of a choral study-class. Music should be selected to illustrate specific points of interpretation, style, form, and period of composition. It should, at all times, be the joyous endeavour of the chorus to make advancement in production of the voices, beauty of tone, balance of the parts, incisive enunciation, well-moulded phrases, flexibility, precision, shading, mood and imagination.

While in Grade IX the emphasis may well be upon songs whose texts carry a strong emotional appeal, in Grades X, XI, and XII more attention should be given to music in its absolute phase. Divested of text, the music in these Grades should lose nothing of its interest. Beauty of tone blending, tone procedure forming beautiful melodic contour and balance of phrases, part leading, and beautiful harmonic progressions, form a tonal discourse that should engage the keen interest of the class and nourish the appreciation of musical texture and mood. Music if not studied for itself can hardly lay claim to a deserved place on the curriculum.

Class work in *elementary theory*, *ear-training*, and *sight-singing* is necessary to give the student a period of concentrated study in the mechanics of musical construction, for the purpose of imparting an intimacy with the elements of musical notation. In training the aural recognition of all commonly occurring rhythmic types and figures, as well as chromatic inflections, it is an important adjunct to the Chorus Singing Course. Such a class is especially valuable in schools where a number of the students have had no public school music training.

A certain amount of incidental study of *music appreciation* may be carried on in conjunction with the chorus class; it is, however, necessarily limited in scope, being confined to the particular music or composer under study. A more comprehensive Course in the appreciation of music is a vital necessity in High Schools, to provide an opportunity for a broad outlook over the field of music in general. Such a course is particularly suitable in Grades X, XI, and XII, following the musical experience gained in Grade IX. The habit of critical listening is cultivated. Lessons are derived through the hearing of a considerable quantity of the best music literature; and an intelligent idea of music forms, history, biography, and aesthetics is gained therefrom, which, in the main, constitutes the work in music appreciation.

Such a course is made practicable through the use of phonographic records. The development of music form and styles can be traced from the earliest times. The distinctive style of individual composers and of "schools" of composers can be comprehended. The various media of musical expression can be illustrated. Biographies of great composers and musical executants may be taught, and the main themes of great compositions, through repeated hearings, committed to memory. It bears the same relation to music education as the subject of Literature, and its history, bears to the study of English.

Harmony properly applied in the High School should mean ear-training of an advanced order as compared with that received in the earlier Music Courses. It is an exploration of the conventional chord material upon which music is constructed. While the study must necessarily involve a consideration of the laws by which chords are grammatically connected, the study must not be allowed to lapse into the mechanical working of exercises whose main purpose is to train one in the avoidance of errors in part-writing.

Rather, should it be to the purpose of enabling the student to give a proper harmonic setting to the products of his musically creative instincts. Rules should follow, rather than precede, practice. There should be more harmonizing of melodies than of figure basses. The taste should be cultivated for aptness and purity of effect in chord arrangements, progressions, and part-leading.

When *orchestra* classes are maintained in Public Schools, there will be no difficulty in organizing fair-sized orchestras in the High Schools. But, even where such classes have not existed, all High Schools should, if at all possible, organize orchestras. The nucleus may be nothing more than a few violins and a piano. With sympathy from the school staff and educational authorities, interest will be generated and other instruments added. It may then become the duty of the local School Board to provide teachers for classes in violin, clarinet, cornet, etc., and to procure for the school those instruments not so popularly found in the homes, as the flute, oboe, 'cello, French horn, stringed bass, and drums, and also make some provision for instruction on them.

Glee Clubs should be drawn from the chorus classes of Grades X, XI and XII, the voices selected by test. Clubs of not more than 32 to 36 (8 or 9 to a part) do the best work. By reason of their more advanced vocal proficiency, they are able to do chorus work of a finer quality and more difficult grade than produced in the regular chorus classes.

The chief aim of the Music Course is to enable pupils to acquire increasing enjoyment in music, both in school and in later life. The Course does not aim to produce professional musicians.

MUSIC 1

Chorus Singing.

While the study and performance of part-songs and choruses should feature more prominently than in Grade IX, a certain number of unison songs should be included, these latter more particularly for the individual sections of the chorus. The music selected should represent folk-songs, classical songs, songs with descant, and modern part songs. Rounds, canons, and other music, with imitative part-movement, should be studied. Variety in the style of music used is desirable. While easy cantatas may be used, a class spending most of the year in preparing a cantata would fail in meeting the requirements of the Course.

Part-songs are for—

- (a) Soprano and alto; soprano and second soprano; soprano and bass; tenor and bass.
- (b) Soprano, second soprano and alto; soprano, alto and bass; soprano (or alto), tenor and bass.
- (c) Soprano, alto, tenor and bass.

Part-songs including tenor or bass are optional, as some schools may be unable to find a sufficient number of tenor or bass voices.

Recommended Song-books.

The Music Hour, Book III (Gage & Co.).

Halcyon Song Book (Silver Burdett Company).

Cantemus, Book I (Curwen Company). (*Cantemus* is for soprano, alto, and bass only.)

Junior Songs; Hollis Dann (American Book Company).

The Silver Book (Music of Many Lands and Peoples) (Silver Burdett).

The Silver Book of Songs for all Grades (Gordon V. Thompson).

A full list of supplementary song-books, operettas, carols, rounds, canons, songs with descant, individual part-songs, etc., will be supplied on request, from the Department of Education.

Elementary Theory.

Relative values of all notes and rests in common use. The tie; the slur; sharps, flats, naturals, double sharp, and double flats. Treble and bass clefs; the alto and tenor C clefs. All major and minor scales with their signatures. Tones and semitones; accent; measures; time signatures, in both simple and compound time. Irregular note-groups to the beat. The barring of simple passages. Tempo indications, marks of expression and interpretation in common use. The technical names of the scale degrees. Intervals and their inversions.

Recommended for Use as Text-books.

Stewart Macpherson: *Rudiments of Music*.

Charles W. Pearce: *Rudiments of Musical Knowledge*.

Ear-training and Sight-singing.

1. Recognizing and staff notating in any of the nine common keys, 3-, 4-, 5-, and 6-note phrases, including no other chromatics than the sharpened 4th *fi*, and the flattened 7th *te*. The two chromatics in their simplest progression only. Distinguishing amongst 2-pulse, 3-pulse, 4-pulse, and 6-pulse measure in sentences sung or played. Aural recognition of the simpler rhythmical types and figures. Writing on a line of the staff the rhythmical outline of a musical motive sung or played. Applying the *so-fa* names to short groups and phrases. Recognition of major and minor triads in root positions and inversions, when played on the piano; also distinguishing any of the notes of a 3-part chord after hearing the chord played; distinguishing the tone qualities of the more common orchestral instruments in each of the orchestral sections.
2. Regular practice in sight-singing. For this purpose, exercises may be found in *777 Graded Exercises in Sight Singing for Schools* (Eagleson), published by the Institute of Applied Art, Edmonton.

Music Appreciation.

The purpose is to acquaint the student with the great literature of music in such a way that he may study it in the light of the

times in which it was composed, and note the manner of development of its various forms. The success of the Course depends on the presentation of a considerable amount of music arranged to show the progress of musical art from the earliest times. Some of the more impressive themes from masterpieces and other works representative of a composer's individual style should be memorized.

The Course should include short, pointed lessons on the rise and development of opera and oratorio, and brief, biographical studies of the great masters, supported by performance of excerpts from their more celebrated works.

In review and extension of the Appreciation Course set for Grade IX, the following are the topics under which the Course will be conducted:

The various media of musical expression.

Vocal classifications:—the soprano voice, alto, tenor, baritone, bass; their differentiations, as, lyrics, dramatic, coloratura, robusto.

Vocal and choral combinations.

Further studies in the quality and capability of orchestral instruments.

Instrumental and orchestral combinations.

The simple elements of form, growing out of a consideration of balance of design in melodic construction.

Song types:—folk-song, popular song, patriotic song, ballad, lied, aria, *chanson*, art-song.

Opera and oratorio:—their form features illustrated. Selections from these large music forms showing development from period to period.

Instrumental forms:—music illustrative of suites, dance forms, the fugue, sonatas, string quartettes, overtures, the symphony, tone poems.

Note-books should be kept by the pupils in which the outline of each lesson is recorded. The books should, periodically, be examined and marked.

Recommended as Text-books for Use of Students:

Music: Creighton (Chatto and Windus).

The Student's Work-book in Music Appreciation (Clarke, Irwin Company).

Music Enjoyment and Appreciation, Parts I and II: Yocom (Ryerson Press).

Reference Books for Students:

The Story of Music: Barbour and Freeman (Burchard, Boston).

The Gateway to Music: Blancke and Speck (D. C. Heath & Co.).

The Good Musician, Parts I, II, III and IV.

Reference Books for Teachers:

The Teacher's Handbook for the Student's Workbook in Music Appreciation (Clarke, Irwin Company).
Listening Lessons in Music: Fryberger (Silver, Burdett Co.).
What We Hear in Music (R.C.A. Victor Co.). (In this book will be found complete lists of phonographic records, with descriptions and numbers, to support the above outline of work.)
Music and Romance: Hazel Kinsella.
Victor Book of Symphony.
Victor Book of Opera.
Choral Technique and Interpretation: Dr. Henry Coward (Novello).
99%: Dr. Stalin (Curwen).
Dictionary of Musical Terms: Elson.

Orchestra or Band.

Musical practice undertaken through membership in a school orchestra or band will be accepted for credit in lieu of the course in Music 1, provided that the following conditions have been met:

1. The orchestra or band must be under the direction or supervision of the school.
2. The members must meet regularly for practice under a competent conductor, the practice sessions occupying at least *four half-hour periods per week*, of which one shall be taken for *Theory* and for *Music Appreciation* alternately.
3. It must master a repertory of at least *ten* selections during the year, these to be of medium difficulty, of good quality, and representing different types.

Such music as the following will be regarded as satisfactory:

Orchestra:

Selections from Faust (No. 190), (Oliver Ditson Company).
Arabian Nights Suite (No. 351), (Oliver Ditson Company).
Ditson Concert Orchestra Folio (15 and P.), (Oliver Ditson Co.).
Amateur Orchestra Folio (15 and P.), (Oliver Ditson Co.).
Bohemian Girl (arranged by Barnard), (Fillmore Music House).
Moment Musical (Schubert), (Carl Fischer Company).
Album Leaf (Wagner), (Carl Fischer Company).
Amateur Orchestra Journal, Volumes II, III, and V.
Progressive Orchestra Book (Willis Music Company).

String Orchestra:

Operatic Airs (Recker), (6 first violins, 4 seconds, 1 'cello); (Leo Feist Publishing Company).
Minuet, No. 2 in G (Beethoven), (Carl Fischer Company).
Dawn of Love (Bendix), (Carl Fischer Company).

Band:

March, Boy Scouts (G. L. Barnhouse Company).
Chimes of Normandy, No. 4 (Oliver Ditson Company).
Selections from Tannhäuser (Wagner) No. 1181 (Fillmore Music House).

Operatic Reminiscences (Amateur Concert Journal) (Carl Fischer Company).

Overture *Northern Lights* (Walter Jacobs).

March *Legion of Honor* (J. W. Pepper & Son).

Glee Club.

The members of this Club may be drawn from Grades X, XI, and XII. The better voices of the chorus class are selected by test, and a good balance of parts obtained. The Club should not be less than 16 in number, nor more than 38. Provided that they are under efficient conducting, meet for practice twice a week throughout the school year, and that the quality of the work done is of a higher standard than that of the chorus class, they may select Glee Club in lieu of Ear-training and Sight-singing.

Song-books:

Hollis Dann: *Assembly Songs*, Vols. I and II (H. W. Gray Company).

Universal Song Book (Hinds, Hayden & Eldredge).

(*Assembly Songs* are for girls' voices only; the *Universal Song Book* is for various combinations of voices, including alto-tenor, and optional and required bass parts.)

A list of individual part-songs, published in octavo form, may be obtained by applying to the Department of Education.

MUSIC 2

Chorus Singing.

Grade XII pupils selecting Chorus may unite with those of Grade XI in making up the personnel of this class. In small schools the class may be formed from the whole student body.

Song Books:

(a) *Assembly Songs*, Vols. I & II: Hollis Dann (H. W. Gray Co.). These are for girls' voices only.

(b) *Glee and Chorus Book*: NeCollins (American Book Co.).

For a list of individual part-songs and cantatas apply to the Department of Education.

The musical director will test the voices of all those applying for membership in the Chorus Class. The test is for the purpose of a correct assignment to parts and the elimination of any who, by reason of having a poor voice, could, in the opinion of the director, neither contribute to nor benefit from the course. The test will include one in fairly easy sight-singing.

Elementary Theory.

As set for Grade X with the following additions:

Chromatic scale, writing in harmonic and melodic forms; syn-copation; transposition from clef to clef and from key to key. Triads and their inversions; arranging root position of major

and minor common chords for soprano, alto, tenor and bass voices. The chord of the Dominant Seventh and its inversions; writing the principal and deceptive resolutions of the Dominant Seventh. All chord arrangements to be made in close score.

Ear-Training and Sight-Singing.

- (a) Recognizing and staff notating (in any but the most extreme keys) 5, 6, 7 and 8-note phrases which may include *fi, si, ri, te, le, me* in their simpler progressions. Tapping short, rhythmical phrases after hearing them sung or played by the teacher. Singing the lower part of short, two-part phrases played on the piano. Singing the lowest, middle or highest tones of any three tones sounded together on the piano, singing the intervals of a perfect fifth, an octave, perfect fourth, major third, minor third and major sixth above a given tone.
- (b) Regular practice in Sight-Singing, using for material the exercises in Books III and IV of "777 Grades Exercises in Sight Singing for Schools" (Eagleson), published by The Institute of Applied Art, 109 Street, Edmonton.

Music Appreciation.

The influence of nationality on music. Folk music of different nations reflecting the character of the people and the mould of their musical thought; related to geographical and political aspect of country. A general review of the course in Music Appreciation as set for Grade X, with provision for appreciation in orchestra, band or glee club activities.

History—The life and work of *any two* of the following composers: Bach, Handel, Haydn, Mozart, Beethoven, Schubert, Brahms, Wagner, Elgar, Debussy, illustrated by recordings of their works.

Textbooks—As listed for Grade X Appreciation.

Recommended Reference Books—As listed for Grade X Appreciation with the following additions:

Outlines of Musical History:—Hamilton (Oliver Ditson Co.).

Summary of Musical History:—Parry (Novello).

Suitable phonographic records in support of the above topics are given in Anne Shaw Faulkner's "What We Hear in Music" (see Grade X course) in which book, also, the topics are discussed.

Orchestra or Band.

Pupils in Grades XI and XII taking Orchestra will do so in the general orchestral ensemble along with Grade X. See note on Orchestra under Grade X for the regulations governing this activity.

Glee Club.

See note under *Glee Club*, Grade X. Membership is accepted in lieu of the course in Ear-Training and Sight-Singing.

COMMERCIAL SUBJECTS

N.B.—Outlines for the courses in Bookkeeping 1 and 2, Typewriting 1 and 2, Stenography 1 and 2, and Office Practice 1 may be had in mimeographed form from the Department of Education on request.

Reference will also be found there to the short course for special students.

BOOK-KEEPING 1A.

The outline for this subject is the same as that for Book-keeping 1, but the time allotment is 3 instead of 5 periods a week.

Textbook:—*Canadian Modern Accounting*, Part I.

The textbook consists of two parts—an introductory part, largely a revision of elementary work, consisting of ten sections indicated by the letters A to J, and followed by *Part I*, the really important part, consisting of sections numbered 1 to 18.

The introductory part should be treated rapidly. As many sections of Part 1 should be used as time will allow. It is suggested that seven sections be a minimum, and twelve a maximum; but the course is not to be restricted to “covering” “prescribed” sections of the textbook.

TYPEWRITING 1A.

The outline for this subject is the same as that for Typewriting 1, but the time allotment is 3 instead of 5 periods a week.

Text-book:—Stuart: *Complete Typewriting Course*, Part I (Copp Clark Company).

STENOGRAPHY 1A.

The outline for this subject is the same as that for Stenography 1, but the time allotment is 3 instead of 5 periods a week.

Text-book:—*Pitman Shorthand* (Canadian Centennial Edition).

COMMERCIAL LAW

This course is directly related to the principles of right and wrong as applied to business dealings, thus touching the daily life of many individuals. It is now recognized as a subject of real worth to all pupils.

All strictly legal technicalities should be avoided, and somewhat the attitude of the business man should be adopted in the conduct of the course.

Aims

1. To give the student a knowledge of his rights and obligations in common business transactions, and to help him, through this knowledge to avoid legal entanglements.
2. To develop the power to reason and exercise good judgment in the application of legal principles to business and private affairs.
3. To develop a wholesome appreciation of law as a social force, through the study of governmental agencies, and the associations of men for business purposes; for example, federal and state commissions, the recording of legal papers, coinage, banks, insurance companies, common carriers, loan associations, partnerships and corporations.
4. To teach the use and purpose of certain common legal documents, such as negotiable instruments, bills of lading, deeds, mortgages, bills of sale and leases.
5. To develop precision of statement through careful analysis of a legal situation, logical thinking and sound reasoning.

SUGGESTIONS RE PROCEDURE

Before the teacher takes up the study of specific topics and the principles of law applicable thereto, the broad basis of law should receive consideration, the need for laws in our social and economic life, the source and methods of enforcing laws, and evidence of business ethics and moral obligations in business dealings.

The pupil should be led to understand the purpose and functions of law as means of protection of rights to individuals.

The teacher should illustrate the principles of law presented in the textbook from outside sources. Adjudicated and other illustrative cases will make the course both interesting and practical. In the use of cases, care should be taken not to select those which are too technical or difficult for high school students, or those which do not illustrate an important principle of business law.

The recitation should be conducted on a plan whereby the pupils will have an opportunity to take an active part. This is the first essential of creating an interest in the subject. Interest will be evidenced by the questions pupils ask and the part they will take in discussion of principles and problems when given the opportunity. The teacher should suggest the use of sound methods of study.

Special effort should be made to have this subject apply to everyday problems likely to occur in the lives of average citizens. An attempt should also be made to study recent legislation; such as, The Farmers' Creditors Arrangement Act, The Debt Adjustment Act, The Revised Debt Adjustment Act and the Reduction of Debt Act and other Acts that may be effective from time to

time. Copies of these Acts may be obtained from the King's Printer at a nominal cost.

The following are important topics: contracts, negotiable instruments, banking, interest, master and servant, principal and agent, partnership, sales, bailment, pledge and lien, guarantee and suretyship, companies, land titles, landlord and tenant, mortgages, insurance, bankruptcy, interstate succession, wills, limitations of actions, common business forms, such as power of attorney, simple contract, lien note, instalment note, notice to vacate.

Textbook: Manual of Canadian Business Law: Falconbridge and Smith (Western Edition—Pitman).

TECHNICAL SUBJECTS

N.B.—Outlines for the courses in shop subjects may be had in mimeographed form from the Department of Education on request.

INTRODUCTION.

The subject of General Shop in the High School will follow the same general plan as was outlined for the Intermediate School. A wide range of options is provided for the school to offer, according to the requirements of its constituency and the financial ability of the district. The purpose of the course is to give a maximum amount of manipulative experience that may be useful in itself as the background for a tool-using trade, but that may be more valuable in satisfying the natural urge among many students to do things. Under the direction of a competent and wise teacher, there are very great educational possibilities inherent in this subject. By the time the student reaches the High School, cumulative personality and attainment records should indicate his inclinations and aptitudes. He may not be a scholastic type, properly appealed to through books or the class-room method of instruction, but he may show distinct ability in creative handwork. He may be inferior in written examination results, but superior in gradings for work done with his hands. By recognizing this ability and encouraging him, because of his success in making things, the whole tenor of his school life may be changed, and even his class work made much more satisfactory. By applying mathematics, science, history, drafting, to shop experiences, these subjects become more vital. In short, because of the interests developed within the student, he becomes more educable.

This course makes provision for varying abilities and experiences on the part of the student. One who has not had any previous experience may elect this option, in which case he will have to begin with the simpler projects, until it is clear he can profit from the more difficult. This must be left to the judgment of the instructor. For one who may have followed shop courses previously, the more difficult assignments or choices may be made.

There are no minimum requirements set out in this programme. The weaker student will be expected to work to his capacity. The more capable student will, in the same way, be required to work to his capacity. He will be expected to do more projects or more difficult projects.

The essence of the General Shop idea is individuality. Few subjects are more adaptable in catering to individual differences among students. Ideally, if an instructor could be secured, who was versatile enough, each student at the same time might work at a different project, using a different medium. Practically, the pro-

jects should be related closely to the student's personal interests, which should be the dominating influence in the choices made, subject to the ability of the student and the limitations of the shop, and always subject to the judgment of the instructor.

A daily log of the work done by each student should be kept. The taking of elaborate notes is discouraged, although there is a place for notes as a record of achievement and a concise statement of the thought processes involved. No project should be attempted without a shop dimensioned sketch having been first prepared. These sketches should be carefully preserved, and with the notebook, made available for inspection. Great care should be taken by the instructor in having each student's plan for his project carefully scrutinized before he begins work. If this is not done, and projects are made which violate principle of good design, the shop is liable to fall into disrepute. The finished project will fail to please, no matter how careful the workmanship may be, unless the design of the project is good. This is fundamentally important. A finished model, to give the greatest satisfaction, must not only show good craftsmanship, but must be functionally fit, structurally sound, and artistically pleasing.

GENERAL SHOP 1.

WOODWORK.

There may be students, desiring to elect this option, who have had no previous training in the use of woodworking materials. This may be allowed, but, of course, such would necessarily have to be assigned projects of a more or less elementary nature. In a smaller school they might take projects outlined for a junior division with which probably they will be working. If they show ability, it might be wise to permit them to proceed with the work of this grade. If they do not show aptitude, weak or backward students should not be encouraged to seek credit in this grade.

The projects in this grade should be of a more advanced type, and might well involve the use of woodworking machinery. Hardwoods might be used for the cabinet work experience, and special attention might well be given to finishes. A boy who has had three years in woodworking might well be given work in building construction, that would make him intelligent in the building of a summer cabin, a garage, or an outhouse. He should know the principles of good construction; how to make window frames, and insert the windows properly; how to make a good door, and hang it properly. Students may select two phases of the three outlined, which will constitute a full year's work.

Lumber.—Standard dimensions of common types, uses; grades of lumber, their uses; hardwoods available for furniture construction, costs, and economical use; estimates of costs of finished products in furniture, or in building construction. The use of the steel square.

Working drawings or plans will be necessary for all shop projects.

In cabinet work, fairly elaborate projects should be undertaken, subject to the approval of the instructor. The use of woodworking machines is encouraged. Design, finish, and decoration of the project are important, e.g., polishing, inlay, carving.

Suggested projects: chesterfield or other table, gate-leg, end table, library table, radio case; piano bench; china cupboard; writing desk; hall stand.

(b) Wood-turning.

Simple spindle-turning and face-plate turning. At least **one** finished piece of work involving a major turning job should be turned out. Much practice work will precede the piece actually carried out.

Suggested models: floor lamp, table lamp, fruit bowls (decorated), table legs.

(c) Building Construction.

Group work in the building of a small building, e.g., dog kennel, child's play house, garage. Special attention will be given to roof construction, window framing, door construction, and stair building; the use of the steel square.

METAL.

A student may take any **one** phase of this work, or a combination.

(a) Machine Shop.

The metal working experience in this phase will involve hand working, and machine tools. A screw cutting lathe, a grinder, and a drill press should be available for machine operations. A set of taps and dies is also essential in the interpretation of the course.

The following processes should be carried out: cutting, sawing, filing, drilling, countersinking, turning, squaring, parting, threading, and polishing.

Suggested projects: tool or drill gauge, clothes hanger, dovetail, screw clamp, tapered pein hammer, punch, machine bolt and nut, knife from an old file, set of spanners.

(b) Sheet Metal.

The development of surface; laying the pattern out on the metal itself.

Processes should involve cutting, folding and forming, rolling, burring and edging, fitting, mitre cutting, soldering.

Suggested projects: pint tin cup with handle, circular or semi-circular scoop, lampstand, urn, bowl.

Ornamental sheet metal, involving brass, aluminum, copper, hammering, fluting, polishing, raising, modelling, saw piercing, etching.

Suggested projects: ash trays, plates, plaques, medallions, trophy shields, ornaments.

(c) Forging.

The work of this unit will be a continuation of that of the previous grades. The student should proceed to more advanced problems, using the knowledge and skill acquired.

Suggested projects: a cold chisel, a rock drill, a camp cooking outfit, ornamental grill, hearth fenders, lamp bracket, business sign, umbrella stand, golf bag support, ornamental metal footstool.

ELECTRICITY.

The purpose of this phase of General Shop is to provide manipulative experiences involving the use of the electric current, with the minimum amount of theory. In the previous grades, a wide range of opportunity has been opened, which should give a basis for more advanced projects.

Suggested projects: the electric system in a motor car; dismantle and assemble on a suitable frame, to make clear all the parts, and their arrangement; storage battery; dismantle and reconstruct, securing the necessary plates; construct and operate a telegraph system, learning the Morse and Continental codes; set up, connect a telephone system; build a wind electric generating system, using an automobile generator, and making the propeller; rewind a burned-out armature coil; construct a radio set, making the cabinet.

AUTOMOTIVES.

The dismantling, reconditioning, and assembling of a motor car and a tractor.

This option should not be chosen unless there are facilities for properly housing such projects. The instructor must have experience with such work before it may be undertaken on the part of the students for credit purposes. Trestles may be built, and chain blocks, jacks, and tools, may be borrowed from the community. The projects may be similarly secured. Cylinder blocks may have to be sent out for reconditioning, and certain other specialized repairs made outside the school, but much of the work can be done in a satisfactory manner by boys of this grade.

The making of a trailer from a discarded motor car makes an excellent shop project.

FARM MECHANICS.

At least two phases of this outline must be followed if credit is to be granted.

Woodwork (outdoor conveniences).

Study of plans or bulletins for the farmer, supplied from the Department of Agriculture, or elsewhere.

Suggested projects: chicken coop, chicken house, hog house, granary, garage, machine shed. Most of these buildings could be built on skids, and delivered, as finished. Local persons might

supply lumber and use the finished product. Stock loaders, hand cultivators, and row makers for the garden make good projects. Woodwork (indoor conveniences).

Step ladders, built-in cupboards, wardrobes, ironing cabinets, kitchen stools, flower stands.

Blacksmithing.

Make hooks, chains, clevises, gate hinges. Sharpen plough shares, cold chisels, drills.

Concrete.

Build more complicated wooden forms; re-inforce concrete with wire and rod; strengthen forms by wires and cleats; build watering troughs, well casings, gullies for stable, barn, or toilet. Smooth and decorate concrete surfaces.

Painting and Decorating.

The durability, resistance to weather and wear, sanitation, appropriateness, and economy of various finishes. The money-saving value of outdoor painting. Preparation for various finishes.

Application of paint, stain, varnish, calcimine. Patterns for sponge calcimining. Calcimine the school walls, surface and varnish desks, paint the school building or parts, or an adjoining home. Decorate the building, with approval of the School Board.

Working with Fabrics.

Make cushions, pillows, quilts, stockings, mitts, caps, shawls. Simple methods of upholstering footstools, chairs.

Harness Repairs.

Sew and rivet harness parts. Make bridles; splice leather lines, saddle straps, mattresses.

Upkeep of Farm Machinery.

Small repairs on binder, separator, plough, seeder, harrow. Study of the construction of farm machinery, by chart. How to secure best draft for a team of horses; gasoline engines—stationary, automobile, tractor.

Wickerwork.

Cure native willow for wickerwork; bark, grass, cleat, weaving, rustic work. Apply woven work to wooden frames, chairs, small tables, flower stands, verandah and garden furniture.

GENERAL SHOP II

The majority of the boys in Grade XI will have had a fairly wide experience with the use of tools during the preceding four years. The necessity for using a variety of media will have passed so far as the majority in the class are concerned. They will have worked with various materials, using various tools, and will, in all probability, have developed certain interests each will care to follow. This inclination should be honored and major projects attempted, even if a project may occupy most of the time of the

year. Effort should be made to give variety that all do not work on the same type of project. More costly material may be used without the danger of spoiling it and wasting money, and the finished articles should have enhanced value because of the skill of workmanship applied. There should be community projects undertaken for the school during the year that a boy does not develop a selfish attitude through making things exclusively for himself.

It is fair to expect that some fine work will be done in this grade. These are merely suggestive. It will be expected that the boy will be continuously and intensely occupied and that a daily log of achievement will be kept. This is important. Shop sketches or plans must be made and retained for inspection. Note books should contain a written analysis, with brief specifications or details of the work to be done. Good design and finish are fundamental.

Wood Work:—Articles of furniture, table, chair, dresser, chest, writing desk, radio cabinet, cupboard. Hardwood is to be preferred. Decoration of a suitable type should be included—carving, inlay, molding, or other surface decoration. Model airplane, model ship, oil derrick, coal tippie, house, building.

Metal Work:—Some major project involving the use of the lathe and metal working machines or forge, flat metal, copper, brass, pewter shaped and ornamented making desk sets, plaques, lampshades, hanging lamps or ornaments; tinned iron or galvanized iron or black iron ornaments—grills, gates, signs; gas engine; model steam engine; clock.

Electricity:—Model motors; radio; transformers; heating and household equipment; telephone or telegraph sets.

Gas Engines:—Overhaul of automobile engine, stationary engine, small diesel construction; building of an engine for driving a model airplane.

Plastics:—Preparation and use of *papier mâché* or gesso for some large project such as topographical map to scale; clay or plasticene modelling of ornaments using mold gelatine or plaster; pottery, including the building of a simple kiln.

The student should investigate various types of project chosen for historical, commercial or special use, referring to library, catalogue and available examples. This necessitates the securing of a fairly comprehensive library and other reference material for the use of the shop.

ARTS AND CRAFTS

Because of the inclusive nature of this subject a student may desire to work at some major interest not suggested in any remarks herein included. Such individuality should be encouraged but the student should submit the details of his plan to the instructor for approval. This might include leather, glass, stone or alabaster work, sculpture, weaving, enamel work and jewelry, bookbinding.

MECHANICAL DRAWING.

Work in Mechanical Drawing will include the use of drafting equipment: T-square, set-squares, scale, and instruments. A study to be made of geometric and projection drawing. A series of at least 30 plates, neatly drawn, should constitute a year's work—these to include: lettering, geometrical construction, conventions and symbols used in drafting, projection drawing (including hidden parts and sections, drawing to scale, and inking).

Text-book:—*Mechanical Drawing Pamphlets*, Lessons 1-10 (inclusive): (Instruments and Materials: Lettering; Geometrical Definitions, Geometrical Problems I, II; Symbols—Dimensions—Inking a Drawing; Principles of the Working Drawing I, II, III, IV), by Tom. C. Plumridge, James McKinney, and Ervin Kenison, American School, Chicago, Illinois.

HOME ECONOMICS

INTRODUCTION.

The programme in Home Economics is planned for those who will have had previous experience with this subject in the Intermediate School. It is quite expected, however, that there will be cases where students will desire to select this option without having had this previous training. This should be possible, in as much as the individual student has been kept uppermost in mind in the drafting of this programme; and a student without a previous course may be given essential experiences, where necessary, to enable her, without too serious loss of time, or other handicap, to take her place in the regular class.

The girl in the home is the central idea about which the details of the programme are gathered. This should be kept in mind at all times, and the actual conditions of life among girls in their homes should be always uppermost. The school is necessarily an artificial environment, and, unless the instruction can be made to carry over into practical situations, it will be of little value. While its main value may be utilitarian, still it has cultural and disciplinary values. Because of its inclusion on a programme of studies, many girls may be made more teachable in academic subjects. School is a more interesting place, and much of the subject matter of the class-room may be made more applicable to actual life situations. The subject has high correlating possibilities.

HOME ECONOMICS 1.

It will be noted that no minimum requirements are specified. This omission implies a responsibility upon the instructor to see that an adequate quantity of work is done during the year by each individual, that will justify the awarding of a credit. While this judgment will necessarily be made by the instructor, it is still subject to the checking of the inspector. To facilitate this check-

ing process, each student will keep a note-book in which will be recorded a dated account of each day's achievement. Projects need not necessarily be retained if their retention interferes with the maintenance of interest and effort; but, where practical, projects should be available for inspection. A detailed record of the work of each student will be reported on the proper forms for credit purposes at the end of the year.

The following analysis will indicate the approximate time that should be allotted to each phase of the subject:

Unit 1.—Foods	14 weeks.
Unit 2.—Clothing	14 weeks.
Unit 3.—Home Management	4 weeks.
Unit 4.—Budgeting	2 weeks.
Unit 5.—Personal Responsibility	2 weeks.

These units may be taken in any order, according to the discretion of the instructor. For Units 4 and 5, the work and discussions will be better handled by extending them over the year.

UNIT 1.—FOODS.

Objectives:

To teach selection, cost, marketing, and preparation of foods on the meal basis, from the standpoint of health, economics, and art.

To develop an understanding of the scientific and economic principles underlying cooking and nutrition.

To develop an appreciation for proper organization and planning of housework, to save time and energy.

To develop a true spirit of hospitality.

Subject Matter:

Review simple dinners. Plan, prepare, and serve more formal dinners, to include: appetizers (fruit juices, fruit cups, canapés); soups; meats, fowl, fish, carving; salads; bread; biscuits, cheese straws; vegetables, less commonly used types, and variety in cooking common types; desserts—pastry, frozen, gelatin, steamed; deep fat frying.

Nutrition; digestion.

Cookery for children, aged persons, invalids, and convalescents.

UNIT 2.—CLOTHING.

Appreciation of the value of careful grooming.

Understanding of the principles of good design as applied to clothing.

Ability to plan a suitable wardrobe.

Ability to make simple clothing.

Ability to choose suitable ready-to-wear clothing.

Discussions and Demonstrations:

Clothing survey; clothing budget—relate to family income; care of clothing—daily care, storing, cleaning, and pressing; principles of design and colour combinations.

Projects:

Select at least **one** from Group I, and at least **one** from Group II.

Group I.—Silk undergarment; nightgown; kimono; lounging robe; tailored pyjamas; shorts and blouse; slacks and blouse.

Group II.—Wool skirt and silk blouse; silk afternoon dress; evening dress.

Problems involved:—selection of patterns, styles, and materials; design; color; quality, and amount of material; some study of textile chosen for garment; trimming.

Construction:—seams, stitches, plackets, finishes, etc., as necessary.

Cost:—compare with ready-to-wear.

Accessories.

UNIT 3.—HOUSEHOLD MANAGEMENT.**Problem:**

Some girls have their own bedrooms, and other share their rooms. What special care do bedrooms require?

Objectives:

To give a clearer understanding of the girl's obligation as a member of the family; to share in the work of the home.

To develop appreciation of the comfort and pleasure to be derived from a clean, orderly house.

Topics for Discussion:

Purpose of personal room:—bedroom, study; advantages in having own room privacy; responsibility in sharing room; furnishings for bedroom, and their selection; arrangement of bedroom furniture; qualities and kinds of bedding; use of colour in bedroom; possibilities of improving furnishings; care of bedroom and clothes closet—daily, weekly, occasional.

Project:

Plan a girl's room, simple in design, inexpensive in outlay. Work from pieces of furniture already on hand. Introduce one or more of the following improvements:—curtains, bedspread, rug, dressing table from boxes, wall book-shelf, painting or refinishing old furniture, a study unit.

UNIT 4.—BUDGETING OF MONEY AND TIME.**Problem:**

How to get more satisfaction from money spent, and how to ensure an efficient and satisfactory day.

Objectives:

To get the most for one's money; the most for one's time; and the most for one's strength. To help the girl gain, by means of the clothing budget, a better understanding of the advantages of definite planning.

Discussions and Activities:

List activities which use time, money, or strength. Discuss relative importance to health, progress, improvement, etc. Recall previous experience, observation, or reading, in relation to budgets. List items commonly included in family expenditures. Estimate individual share of the family budget. Make inventory of clothes on hand. Avocational expenditures.

Projects:

Keep personal accounts for year. Make a time budget for a high school girl.

UNIT 5.—PERSONAL RESPONSIBILITY.

Problem:

How can high school girls help to make their homes happier, and contribute to the betterment of society?

Objectives:

Appreciation of individual responsibility to the home, and to the community.

Topics for Discussion:

The 100 per cent. girl.—Personal characteristics that help in life work; that help make happiness; that help make a happy home. Ways that these characteristics are developed and strengthened.

TEXT-BOOK.

Jensen, Jensen & Ziller: *Fundamentals of Home Economics* (Macmillan).

REFERENCE BOOKS.

Jensen, Jensen & Ziller: *Fundamentals of Home Economics* (Macmillan).

Lannan, McKay & Zuill: *The Family's Food* (Lippincott).

Bailey: *Foods—Preparation and Serving* (Webb Publishing Company).

Trilling, Williams & Reeves: *A Girl's Problems in Home Economics* (Lippincott).

Bailey: *Meal Planning* (Manual Arts Press).

Chambers: *Breakfasts, Luncheons, Dinners* (Boston Cooking School Magazine Company).

Hunter: *The Girl To-day—The Woman To-morrow* (Allyn & Bacon).

Graves & Ott: *Your Home and Family* (Little, Brown and Co.).

- Jordan, Zeller & Brown: *Home and Family* (Macmillan).
 Justin and Rust: *Home Living* (Lippincott).
 Shultz: *Making Homes* (Appleton).
 Trilling and Nicholas: *The Girl and Her Home* (Houghton-Mifflin).
 Starrett: *The Charm of Fine Manners* (Lippincott).
 Kaufman: *Teaching Problems in Home Economics* (Lippincott).
 Van Gelder: *From Thimble to Gown* (Allyn and Bacon).
 Pickens: *The Secrets of Distinctive Dress* (International Educational Publishing Company).
 Rathbone & Tarpley: *Fabrics and Dress* (Houghton-Mifflin).
 Denny: *Fabrics and How to Know Them* (Lippincott).
 Everson: *Practical Sewing* (Ryerson).
 Dyer: *Textile Fabrics* (Houghton-Mifflin).
 Bush and Welbourne: *Design* (Little, Brown and Company).
 Gillum: *Color and Design*.
 Butterick: *Principles of Clothing Selection* (Macmillan).
 Friend: *Earning and Spending the Family Income* (Appleton).
 Friend and Shultz: *Junior Home Economics Units* (Appleton).

HOME ECONOMICS II

During the previous four-year period various interests involved in home making have been developed. Experiences in food preparation have been had, and certain fundamentals in the economics of food have been learned.

By the time Grade XI is reached the student should have gained a fair proficiency with her needle in the making of her own clothing and keeping it attractive. She will have made several articles which make her room or her home more attractive. Her taste in the selection of a home, and in building it into an attractive place will have been developed. The use of certain household equipment, as labor-saving devices, has been studied. The place of such equipment in a home with financial limitations will have been discussed. Social and family relations will have been discussed with the view to making her life more happy and her relationships more acceptable.

For the fifth year this outline of studies plans to bring to an issue the experience of the girl secured either in the school or in the home with the definite application of the skills and knowledge acquired to the making of home from small beginnings as though it were the personal problem of each girl. Whether she will be privileged to make a home for herself or not, she will have to assume responsibility to a degree for the furnishing and house-keeping of her own living quarters.

There is no definite requirement set out in this program. The teacher, who will act as a director rather than a lecturer or a group instructor, will be the judge as to what a girl shall do and the part she will take in the little society of the class or the larger life of

the school. Ideally there will be a few engaged in the kitchen part of the school home, another group in the living room section engaged in craft work, home decoration projects, clothing, the whole spirit being that of a home whose standards are just a little higher than the general average of the homes in the community. Projects that may be motivated with a direct use possibility should be encouraged. Projects that may be fitted into the life of the girl in her home should be sought, even if these involve team work; such as the making of bedspreads, bolsters, pillow slips, runners, curtains, ornaments, boudoir chests, overhauled furniture, rugs, and dressing table gadgets. Many of these things may be made very inexpensively but very prettily. There is no reason why the girls should not have a single kit of tools in the shop with which to reconstruct furniture or make essential frames, shelves or equipment.

A girl may choose to work on the A, B, C, or D section of the course, each of which will have equal credit. The measure of the amount of work done will be the ability of the girl working at a reasonable rate throughout the term.

A daily log of the achievement of each girl shall be kept. Each girl will be expected to work to her capacity and a high standard of attainment should be sought and maintained. Art principles should be carefully observed and applied in the projects worked out. This is necessary if the results of the class work are to bring the greatest satisfaction. Originality in design should be encouraged and local motifs sought about which to work artistic schemes. Color harmonies are particularly important.

Projects should not necessarily be retained in the school although the maintenance of the school room as an attractive place should have the constructive interest of each girl. She should be required to take some major part in a community project and not be permitted to use her time exclusively in producing something for herself. It will be a desirable objective to dispose of the made projects at the close of the year that the next incoming class may have a clear course in working out their individuality.

The following suggestions are intended to give a lead as to what might be worked out during the year.

Section A

The making of a home will be the main motive during the year.

The home site—location; building or renting a house; instalment buying for building or furnishing; insurance, services, grounds, garden, economics.

Home furnishing—furniture for various rooms; economy; equipment such as range and heating system, cooking equipment; food storage and preparation and serving; furnishings—floors, walls, windows, color schemes, decorations, arrangement; library, books, periodicals, their use and care; housekeeping routine; housekeeping aids: help.

To as great an extent as possible the classroom should be made a home in which to work out through the project method class discussion. This offers great leeway for ingenuity.

Laundry and cleaning, dyeing, decorating fabrics.

Home craft—cross-stitch, petit point, weaving, cane and raffia, embroidery, rug making, quilting, batik, tie and dye, stick printing, stencilling; electricity—installing fuses; inserting washers in taps. The use of common tools, screw driver, plane, hammer, chisel, wrench. Actually make some project. Home ornaments, copper, leather, plastic resins.

Food menus and service:—breakfasts, lunches, dinner, tea parties, special occasions, work or school lunches, picnic and outing menus.

Home relationships—conventions, understanding, compromises, entertainment, social responsibilities, insurance—fire, life, accident and health, burglary.

Home nursing and the care of invalids and children, diets and menus.

Clothing—garments, according to ability of girl; care of clothing, mending, remodelling, economics.

How to make a bed; care of bathroom and basins.

It will be desirable to have the class visited by men and women representing certain interests of value to girls. It would be well to inspect some well-set-up homes in the community as an object lesson. The whole spirit of the course should be that helpful to a young woman faced with the problem of setting up a home.

Section B.

SEWING

The desired outcome of this course is to aid a girl in making her own clothing economically, to buy suitable clothing economically, and to alter garments to get a good fit, and an attractive costume.

Patterns:—commercial, altering, variety, skirt draft, collar draft, changing plain sleeve draft to fancy sleeve.

Textiles:—wool and silk, the source, manufacture (not in detail), finish, care of silk and wool, laundering, dry cleaning, purchasing and testing emphasized, comparative costs.

Color and Design:—line and design as applied to girl's own type; complete unit, shoes and hat; color harmony in wardrobe and dress, related to girl personally; becoming hats, etc.

Construction:—novelty seams added to first year's knowledge, faced hems, stitches—cross, faggot, hemming, smocking, bound buttonhole in wool, skirt placket, faced placket in silk, commercial finishes, pinking and shirring, simple ideas in tailoring.

Suggested Projects:—To meet girl's own need in silk or wool. Blouse, skirt, dress, tailored jacket, remodelled hat.

References:—Selected readings from books listed in Fabric and Dress Design Courses (Technical Subjects).

Lace:—Buying, judging, common laces.

Section C.

FOODS AND COOKERY

The aim in this course is to develop skill in the preparation of foods in relation to the home and special hospitality occasions both within and without the home. An appreciation for proper organization and planning to save time and energy should result from this study. A student working with this option should develop skill and knowledge as to etiquette and proper serving methods.

The student may not cover all the details suggested here but will select or be assigned to those that require enough time to secure four credits. It is strongly urged that this program be worked out by having the girls working in groups, different projects being covered by different groups working at the same time.

Selection will be made among the following laboratory suggestions.

Menus for breakfast, lunch, dinner—prepared and served; afternoon tea, evening party supper, Sunday evening supper, serve-yourself meal, after-sport party supper, breakfast party supper, picnic, school or work lunch.

Practical work in **table service and setting**, use of left-overs, buying, keeping account of time and money used in securing, caring for, and the preparing and serving food.

Preservation of food, salting, drying, refrigeration, canning, jellies, pickling.

Special diets—anti-constipation; reducing and fattening; invalid and children's.

Section D

CRAFT AND HAND NEEDLE WORK

The following are suggestions as to craft problems that may be attempted. It is not intended that every student will work at all these problems. It is expected that different students will be working at different problems at the same time.

1. Girl's Room

Remodelled furniture, redecorated furniture; curtains, bedspreads and quilting, cushions, dressing tables and decorations, novelty lamps, framed pictures, chests, pillow cases, dresser covers, weaving, rugs.

2. Sewing Room

Lampshades, book ends, copper ornaments, soapstone or alabaster ornaments polished; curtains, rugs, chesterfield covers, runners, upholstery.

3. Bed Sitting Room

Slip covers, book cases, chests, spinning, batik, petit point, embroidery, cross-stitch, applique, weaving, felt applique. Leather tooling, raffia and reed basketry, knitting.

The girls in selecting this option should have at their disposal a simple kit of wood working tools and a painting outfit.

NEEDLEWORK

Under certain conditions it may not be possible to offer the full Home Economics course, particularly the foods section; but it may be feasible to do some work in Sewing with the girls. These conditions are more likely to occur in rural or smaller urban schools, where the class may be small and the facilities limited. The organization of a hand needlework class is simple; and the necessary equipment is not elaborate, being little more than a thimble, a needle and some thread. The student's desk may be the work table and the materials with which to work may be brought from home. Boys may be interested in certain types of needlework.

While no minimum requirements are set out in the course, the teacher will be held responsible for seeing that a reasonable amount of sewing is accomplished. Each student will be required to work to her capacity, and her final grading will be determined in terms of what is actually achieved in relation to her ability.

The teacher will be the judge as to the assignments any student may be given.

A carefully kept note-book is essential for each pupil, but this should not be stressed at the expense of actual achievement. Samples of work in textiles, color schemes, pictures and clippings are properly included in the note-book, but even this may be overdone. This book should be available to the inspector, who will give it careful consideration in evaluating the status of the pupil and the type of work being done in the class.

A daily diary, record or log shall be kept in a separate section of the note-book.

Provision should be made for a reference library, which should be readily accessible to the pupils. Assignments should be made frequently which call for the use of the reference library.

The nature of the fabrics used will be studied with respect to type of fibre—cotton, linen, silk or rayon; weave, qualities, and servability for the purposes designed. This work should be done incidentally when these fabrics are being used.

A. Construct and decorate some household article, such as towel, pillow slip, sewing bag, shopping bag, laundry bag, knitting bag, chesterfield set, using various sewing stitches; such as basting, hemming, overhanding, overcasting, running, backstitching, where strength is required; and decorative stitches, such as outline stitch, chain stitch, blanket stitch, hemstitch, cross-stitch, button-hole stitch as for scallops, satin stitch.

B. Construct and decorate with the use of a pattern some simple garment, such as apron, slip, pajama set. Embroider or applique a monogram or a simple pattern, using color.

With the use of a pattern construct a simple blouse, or house dress.

These garment problems will involve simple construction processes such as the making of collars, cuffs, plackets, button-holes; and attaching fasteners, such as buttons, hooks and eyes and dome fasteners.

C. Needlecraft—knitting, quilting, cutwork, drawn work, crocheting, needlepoint, cross-stitch, weaving (weave-it "loom") as applied to some useful article.

Requirement.

At least two articles must be completed, one from B and one from A. or C. This requirement is the minimum. The capable student may achieve more—one article from each group, or even more.

Care and repair of textile articles. Mending, patching and darning; laundering; removal of spots and stains.

Reference Books.

1. Practical Sewing—Everson—Ryerson Press.
2. From Thimble to Gown—Van Gilder—Allyn & Bacon.
3. Clothing for the High School Girl—Boldt & Harkness Lippincott.
4. Textiles—Nystrom—D. Appleton & Co.
5. The Mode in Dress and Home—Donovan—Allyn & Bacon.
6. Fabrics and Dress—Rathbone & Tarpley—Houghton-Mifflin.
7. Art in Everyday Life—Goldstein—MacMillan.
8. Textile Fabrics—Elizabeth Dyer—Houghton-Mifflin.
9. Samplers and Stitches—Handbook of Embroidery—Christie—Batsford.
10. Making Smart Clothes—Modern Methods in Cutting, Fitting and Finishing—Butterick.
11. Simplicity Sewing Book and Charts—419 4th Ave. West, New York.
12. McCall's Patterns—Manual of Instruction—Toronto.
13. Butterick Patterns—Manual of Instruction—Toronto.
14. White Sewing Machine Course in Dressmaking—White Sewing Machine Co.—Cleveland, Ohio.
15. Singer Sewing Machine Manual—Singer Sewing Machine Co.

VOCATIONS AND GUIDANCE

This course is based on the assumption that high school students *have the right* to be furnished by the school with information regarding vocations and vocational prospects, and the right also to have *counsel and guidance* from the school in adjusting themselves and their school programme to their vocational interests. It is assumed, further, that the school likewise has the right to require from each student an inventory of his capacities, abilities and resources of personality and of character, and should encourage the student to maintain high standards of personal efficiency, and of civic and moral responsibility.

Some phases of this guidance programme are very closely related to sections of the course in *Health Education*, and in *Sociology and Psychology*. This circumstance is to be treated, not as overlapping, but as correlation.

The course does not cover the whole field of guidance and character growth but is intended, rather, to deal in a general way with the main factors in guidance and with the development of personality and character. Except in a few centers, no formal guidance programme has been followed in Alberta. Hence, the ground usually covered in guidance and character development programmes in Grades VII to XI will be dealt with in part in this course which is intended for Grades X and XI.

The teacher should treat the course as objectively as possible. Experiences and concrete illustrations from the life of the student should serve constantly to keep the procedure practical and challenging. Student participation by individual and group investigation and presentation of reports and group discussion is essential to a worth-while course. The course is primarily one of *group* guidance but, for greatest efficiency, should be supplemented by individual counsel.

School organization and procedure along democratic lines will give the greatest opportunity for varied activity, individual initiative and socialization of the group. Learning situations should be realistic, and the class atmosphere natural.

A broad understanding of human psychology and wide reading in varied fields on the part of the teacher, together with an experimental and investigative approach, are necessary to make the course vital.

No textbook has been prescribed. A list of reference books is appended, including many of the most valuable recent contributions to the subject. The following book is recommended for use by students and teachers as a reference book:

Choosing Your Life Work: Alberta Teachers' Association (1938). A number of copies of this book should be placed in classroom library, along with copies of other books chosen from the list of reference books.

The following book will also be found useful by the teacher:
Guidance in Secondary Schools: Koos and Kefauver (MacMillan Co.).

Publications of Canadian and American governments can be secured as published.

SUMMARY OF COURSE.

- I. Personal Inventory.
- II. How to Succeed in School.
- III. Vocations.
- IV. Educational Guidance.
- V. Intelligent use of Leisure.
- VI. Character and Conduct.
- VII. Civic Guidance.

I. PERSONAL INVENTORY.

Out of self-analysis grows the student's understanding of his relationship to his family, his school, his social environment and possible future activities.

Every student should begin the course by a personal stock-taking. Each of the forms used for the class survey should be filled out in detail, the information being confidential and available only to teacher and student.

Record forms by courtesy of the British Columbia Department of Education, Programme of Studies for Senior High Schools.

No. 1. FAMILY RECORD

The following questionnaire is for the purpose of gathering some general statistics about your class in school.

1. Name..... Class..... Birth date.....
(In full, last name first.) (Day, Month, Year.)
2. Address..... Tel. No..... Age.....
(Years, Months.)
3. Where born?
4. How many in household?..... In family?..... At home?.....
5. Father's name Country of birth
- Or
6. Step-father's name Country of birth
- Or
7. Step-mother's name Country of birth
- Or
8. Name of guardian..... Country of birth
9. Father or mother deceased? (state)
10. Both parents at home?
11. Children at home..... At School At work.....
(Under school age.)
 Unemployed..... Total.....
12. Father's occupation..... Working?..... On relief?.....
13. Mother's occupation (if other than at home)

14. How many of family completed:

- (a.) Elementary School
- (b.) High School
- (c.) University
- (d.) Business or Trade School
- (e.) Any other (state)

No. 2. PHYSICAL RECORD.

- Name..... Date.....
 Class.....
1. Height.....ft.....in.
 2. Weight.....lb. Overweight.....lb. Underweight.....lb.
 3. What is the condition of your general health?.....
 4. Do you tire easily?.....
 5. Do you suffer from headaches or other pains?.....
 Where?.....
 6. What contagious diseases have you had? Diphtheria?.....
 Scarlet fever?..... Whooping-cough?..... Measles?.....
 Others?.....
 7. Have you ever had any trouble with your eyes?.....
 8. Have glasses been recommended for you?.....
 9. Do you wear glasses now?.....
 10. Have you ever had trouble in hearing?.....
 11. Have you ever had any heart-trouble?.....
 12. Have you ever had stomach-trouble?.....
 Have you any other physical defects? (state).....
 14. Have you ever had a major surgical operation? (state).....
 15. Name any illness that has kept you out of school a month or more?.....
 16. Name any serious injuries you have ever suffered?.....
 17. What is the condition of your teeth?.....
 18. Do you have trouble in breathing through your nose?.....
 19. Do you have a frequent sore throat?.....
 20. Have you had your tonsils removed?..... Adenoids?.....
 21. Have you a tendency towards nervousness?.....
 22. Have you or have you had a speech defect?.....
 23. Have you ever been in a fresh-air class?.....
 24. Have you regular hours for sleep?..... How many?.....
 25. What time do you usually retire?..... Arise?.....
 26. Do you exercise every day?.....
 What games? (state).....
 27. Do you drink coffee?..... Tea?..... How often per day?.....
 28. Do you smoke?..... How many cigarettes per day?.....
 29. Estimate times absent in last year because of illness?.....
 Cause.....
 30. Do you usually have a good breakfast?.....
 31. Of what?.....
 32. What is your usual time for meals?.....

No. 3. SCHOOL RECORD

- Name..... Date.....
 Class..... Course.....
1. What Elementary Schools did you attend?.....
 2. What Intermediate or Junior High School did you attend?.....

3. What other High School, if any, have you attended?
4. Did you attend any other school in any other province or country? Where?
5. Why did you choose this school?
6. What subjects do you like best?
7. Why?
8. What subjects do you dislike most?
9. Why?
10. How long do you study each night? (average)
11. Which subject takes the most time?
12. Do you have a room at home to study in quiet?
13. Is the light good?
14. Is the room warm?
15. Do others study with you? (state)
16. Is there any one at home who can assist you intelligently?
17. Do you play a musical instrument? What?
18. Do you play in the school orchestra? Other?
19. To what school clubs do you belong?
20. To what school teams do you belong?
21. What grades do you usually receive?
22. Could you do better?
23. In what subjects would you like help?

No. 4. SOCIAL RECORD

- Date
- Name Class
1. What regular duties do you do at home? (chores, etc.)
 2. Do you receive an allowance? How much?
 3. Have you a job outside your home?
 4. What? Employer
 5. How much do you earn per week?
 6. How many hours do you work per day? per week?
 7. How late do you work at night?
 8. Would you like a job for after school? Saturdays?
 9. What?
 10. In what work have you had experience?
 11. How much money do you spend per week? On pleasure
On necessities (car-fare, etc.)
Total
 12. Have you a bank account?
 13. How do you spend your spare time?
 14. Do you belong to the Guides, Scouts, Taxis, etc? (state)
 15. To what other clubs outside school do you belong?
 16. What Sunday School do you attend?
 17. What Church do you attend?
 18. How do you spend your summer vacation?

No. 5. FUTURE PLANS

- Date
- Name Class
1. When do you intend to leave school?, 19
 2. Do you intend to complete your High School Course?

3. If not, why?
4. If going to work, is it to help at home?
5. Do you expect to go to University? Which?
6. What do you want to do to earn your living?
7. What are you doing to prepare for it? (outside of school)
8. To whom have you talked about this work?
9. Do your parents wish you to follow this work?
10. In what other occupations are you interested?
 - 1st choice
 - 2nd choice
 - 3rd choice
11. List any relatives who might assist or advise you.

Name.	Occupation.
1.....	
2.....	
3.....	
12. List any friends who might assist or advise you.

Name.	Occupation.
1.....	
2.....	
3.....	

II. HOW TO SUCCEED IN SCHOOL.

1. Discussion of Monthly Reports.

- (a) Weak subjects and the causes of the weaknesses.
- (b) Strong subjects and the causes of strength.
- (c) Suggestions for improvement.

Suggested problems:

- (a) What are the reasons for low grades?
- (b) What are your reasons for disliking to learn a particular subject?
- (c) Is it reasonable to spend your time only on subjects that you like?
- (d) If you obtain a low grade in a subject should you be angry with your teacher, the subject or yourself?

2. Human Capacity to Learn.

- (a) Individual differences.
- (b) The importance of living up to one's capacity.

3. How to Study.

- (a) One of the main reasons why people do not make the best use of their capacity is that they do not know how to study.
- (b) Hints on how to study:

(1) Physical conditions—

- Sufficient sleep.
- Proper food.
- Correction of physical defects.
- Plenty of exercise.

(2) Surroundings—

- Light and temperature.
- Quiet place for study.

- Regular place for study.
 - Equipment at hand.
 - Freedom from interruptions.
 - (3) Study schedule.
 - Regular time for study.
 - Definite time allotment for each subject.
 - Most difficult subject studied first.
 - Place on schedule for systematic review each night.
 - (4) Concentration—
 - An attitude of confidence in yourself.
 - Avoidance of “puttering around”—begin at once.
 - Use of will-power.
 - (5) Taking hold of the lesson—
 - Knowing the aim of the lesson and having a reason for studying it.
 - Giving the mind a rest between subjects so as to allow your learning to become “set”.
 - Appreciation of the unity of the lesson.
 - Grasping main points of the lesson—fallacy of cluttering up the mind with unimportant details.
 - Special use of outline plan.
 - (6) Memory an aid to learning—
 - Trying to understand what you are attempting to “fix”.
 - Memorize by wholes instead of by parts.
 - Read and state aloud to intensify impression.
 - (7) Make a daily schedule for a week to see where your time goes.
4. Self-rating of pupils—Progress Chart.
- (a) Methods—Keep a record of your achievement.
 - (b) Standards.
 - (c) Application of results for improvement.

III. VOCATIONS.

“Vocational guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon it and progress in it.”

1. General Classification of Occupations

Before undertaking a study of occupations it is necessary to know something about the various kinds of industries and occupations which exist.

The following classification by industries or types of service rendered is similar to that adopted for census returns and government reports.

Agriculture

- a. Mixed farming.
- b. Specialized field crops.
- c. Stock-raising, ranching, and fur-farming.
- d. Dairying.

- e. Poultry-keeping.
- f. Bee-keeping.
- g. Fruit-farming.
- h. Market-gardening.
- i. Nurseries and floriculture (horticulture).

Fishing

- a. Inland-water or fresh-water fishing.
- b. Deep-sea fishing.
- c. Inshore fishing (shell-fish, etc).

Logging

- a. Logging for lumber, timbers, ties, etc.
- b. Pulp-wood logging and barking.
- c. Fuel and charcoal.
- d. Land-clearing.

Hunting

- a. Fur-trapping and hunting.
- b. Food and protective hunting or trapping.

Mining

- a. Coal.
- b. Iron.
- c. Precious metals.
- d. Other non-ferrous metals.
- e. Non-metallic minerals, asbestos, etc.
- f. Oil and gas (wells).
- g. Salt (wells and mines).
- h. Stone (quarries).
- i. Clay, sand, and gravel (pits).

Manufacturing

- a. Vegetable products.
- b. Animal products.
- c. Textiles and clothing.
- d. Wood and paper products.
- e. Printing, publishing, and allied products.
- f. Iron and steel products, machinery, etc.
- g. Non-ferrous metal products.
- h. Non-metallic mineral products.
- i. Chemical and allied products (batteries, drugs, etc.).
- j. Miscellaneous products.

Electric Light and Power

- a. Stationary enginemen and firemen.

Building and Construction

- a. Brick and stone masons.
- b. Carpenters.
- c. Electricians and wiremen.
- d. Painters, glaziers, etc.
- e. Plumbers, steam-fitters, sheet-metal workmen.
- f. Any others not named.

Transportation and Communications

- a. Railway transportation.
 - (a.) Steam railway conductors and brakemen.

- (b.) Locomotive engineers and firemen.
 - (c.) Section foremen, sectionmen, trackmen.
 - (d.) Street-car conductors and motormen.
- b. Water transportation.
 - (a.) Officers (captain, etc.).
 - (b.) Sailors, deck-hands.
 - (c.) Engineers, firemen, etc.
- c. Road transportation.
 - (a.) Chauffeurs, bus and truck drivers.
 - (b.) Teamsters, deliverymen, drivers.
- d. Air transportation.
 - (a.) Pilots, engineers, groundmen, stewardesses.
- e. Other transportation and communication.
 - (a.) Postmen, mail carriers.
 - (b.) Telegraph and telephone operators.
 - (c.) Messengers.
 - (d.) Linemen, cablemen.
 - (e.) Radio, wireless operators and technicians.

Storage

- a. Packers, craters.
- b. Carters.
- c. Storers.
- d. Shippers—receiving: city, country; road, rail dispatching; water; air.

Commerce

- a. Wholesale distribution. Personnel.
- b. Business service (advertising, auditing, statistics).
- c. Business agencies (brokers and representatives).
- d. Retail selling or distribution.
 - (a.) Owners, managers, dealers.
 - (b.) Salesmen, saleswomen.
 - (c.) Commercial travellers.
 - (d.) Deliverymen.

Finance

- a. Banking (commercial and private).
- b. Investment (credit and loan banking).
- c. Insurance and protection.
- d. Trust companies and estate management.
- e. Real estate.

Service

- a. Public.
 - (a.) Municipal government and administration.
 - (b.) Provincial government administration.
 - (c.) Federal government administration.
 - (d.) Social service.
- b. Professional.
 - (a.) Clergymen, nuns, brothers, religious workers.
 - (b.) Lawyers, justices, magistrates.
 - (c.) Doctors, dentists, opticians, osteopaths.
 - (d.) Nurses, male, female; hospital orderlies.
 - (e.) Professors, teachers.

- (f.) Engineering professions—civil, mechanical, mining, chemical, architects, draughtsmen, etc.
- (g.) Accountants, auditors.
- (h.) Artists.
- (i.) Writers.
- (j.) Musicians.
- c. Athletics, sports, entertainment (professional).
- d. Personal.
 - (a.) Restaurant, hotel, boarding-house keepers.
 - (b.) Matrons, stewards, waiters, waitresses.
 - (c.) Janitors, watchmen, caretakers, chauffeurs, gardeners.
 - (d.) Barbers, hairdressers, manicurists, and apprentices.
 - (e.) Cooks.
 - (f.) Domestic servants.
 - (g.) Laundering, cleaning, dyeing, pressing.

Clerical

- a. Stenographers, book-keepers, office clerks, machine operators.

Miscellaneous

- a. Golf caddies.
- b. Deep-sea divers.
- c. Private detectives.
- d. Any other.

A second classification which may be useful in the selection of a suitable vocation can be made by separating the occupations according to the nature and training requirements of the work performed. For example:—

Manufacturing

- Iron and steel products, machinery, etc.
 - (a.) Proprietors and directors (capital).
 - (b.) Officials and executives.
 - (c.) Professional employees and consultants.
 - (d.) Supervisors and foremen.
 - (e.) Skilled manual or mechanical workers.
 - (f.) Semi-skilled manual or mechanical workers.
 - (g.) Skilled clerical or office workers.
 - (h.) Semi-skilled clerical or office workers.
 - (i.) Unskilled workers or labourers.
 - (j.) General and miscellaneous.

2. Outline of Detailed Study of Selected Occupations.

- (a) How information in regard to occupations can be secured—books, periodicals, trade journals, etc.
- (b) Nature of the work—main advantages and disadvantages.
 - (1) Factors that interest and develop the worker.
 - (2) Factors that cause physical or nervous strain.
 - (3) Factors that restrict mental growth.
 - (4) Factors that are in other respects important as affecting the welfare of workers (i.e. liabilities to accidents, occupational diseases)

- (c) Qualifications and training needed.
 - (1) General education.
 - (2) Necessary technical education.
 - (3) Manipulative skill.
 - (4) Other requirements—qualities such as accuracy.
- (d) Possibilities and requirements of occupation.
 - (1) Provision made for systematic instruction.
 - (2) Necessary technical knowledge.
 - (3) Manipulative skill.
 - (4) Extent to which occupation can be learned in establishments.
 - (5) Line of promotion.
- (e) Remuneration.
 - (1) Wages.
 - (2) Special.
- (f) Hours of work.
- (g) Seasonal demand for work.
 - (1) Busy seasons.
 - (2) Slack seasons.
 - (3) Fluctuations in employment.
- (h) Are workers organized?
- (i) Entrance age.
- (j) Time required to learn duties.
- (k) Does supply of labor meet demand?
- (l) Is demand for labor increasing or decreasing?
- (m) What is the source of supply?
- (n) Common deficiencies of workers. (State of Washington Junior High School Manual, page 63).

IV. EDUCATIONAL GUIDANCE

The aim of Educational Guidance is to assist students in choosing, preparing for, entering upon, adjusting themselves to and making progress in their present and future educational program.

1. (a) Consideration of personal inventory chart made in Part I, at the beginning of the year, to discover strengths and weaknesses in relation to occupational interests.
- (b) Consideration of scholastic reports.
- (c) Consideration of results of tests and measurements.
Note.—This topic is personal and must be dealt with individually.
2. Importance of Completing the High School Course.
 - (a) University Matriculation.
 - (b) Normal Entrance.
 - (c) Desirability of high school completion for the following:
 - Work in office.
 - Sales work.
 - Semi-skilled labor.
 - Skilled labor.
 - (d) A broader understanding of the intricacies of modern life.

- (e) A greater appreciation of literature, art, music, social intercourse, theatre, sports, and outside activities.
 - (f) Increased need for more education in order to secure a position because of present-day competition and specialization.
3. Detailed Study of Professional Occupations as suggested under "Vocations."

V. INTELLIGENT USE OF LEISURE

The machine and power age has diminished the necessary hours of labor. Hence students need guidance for leisure—preparation for wise recreation.

1. **Athletics**—all-round physical proficiency, co-operativeness and sportsmanship.
2. **Clubs.**
 - (a) Clubs should represent a wide range of wholesome interests. They should develop hobbies.
 - (b) Clubs furnish a healthy outlet for surplus energy.
 - (c) Clubs provide opportunities for the "unsocial" or introverted child, and socialize him.
 - (d) Clubs furnish material for weekly assembly, school concert, etc.
 - (e) Clubs give opportunity for training in leadership.
 - (f) Clubs contribute to learning by providing activities related to regular class work; e.g. Art, Book-lovers, Science, Home Economics, etc.

VI. CHARACTER AND CONDUCT

The school is responsible for the students' physical, social and intellectual development, as well as for vocational guidance; but the chief purpose of education is the building of moral stature. Mere pupil assent to platitudes and seemingly impractical ideals is valueless. Every effort should be made to have pupils establish convictions based upon reasoned conclusions.

Direct instruction must seek to instil self-control, self-reliance, reliability, honesty, fair-play, co-operativeness, clean-mindedness, kindness, loyalty, considerateness and truthfulness.

To help the students to develop right habits and high ideals, and learn to form right judgements, the problem-solving method is best. After the problem has been presented to the class, the students should be encouraged to express their views freely, and informally.

Such questions as the following might be discussed by the class:

1. Is cheating on an examination immoral?
2. Is it the duty of society to find employment for everyone?
3. What should be the conduct of a student or a group of students in public places? (e.g. at games, in street cars, at theatres).
4. What are some of the means adopted by people to acquire popularity?

5. What is sportsmanship?
6. What qualities and characteristics are necessary for leadership?
7. What should our attitude be with regard to conservation of natural resources?

VII. CIVIC GUIDANCE

The aims of this division include the development by the student of worthy school, community, province, nation and world citizenship.

The best procedure by which to develop a realistic civic consciousness is by organizing the class into a miniature society or club duplicating the social, economic, political, intellectual, ethical and other relations of the community. Such organization would be similar to the room organization in a student-government-organized school.

1. Suggested Room Organization.

An analytical discussion of the qualities essential to officers should precede the formal organization.

Constitution:

- (1) Officers—functions, responsibilities, qualifications.
- (2) Procedures—elections, meetings, committees.
- (3) Rules and Regulations.

2. Suggested Topics for Class Consideration

Topic I.—Civic Pride—School, Home, Community, Town.

Suggested Problems:

- (1) What projects could be carried out to beautify the school?
- (2) What is your responsibility towards the property of
 - (a) school, (b) home, (c) community?

Topic II.—Responsibility of a student to his Home and School.

Suggested Problems:

- (1) What evidences of good and of bad citizenship do you see in your school and in your community?
- (2) What are your responsibilities to your home and to your school?

Topic III.—Qualities necessary for leadership in civic affairs.

Topic IV.—Student co-operation in school activities.

Topic V.—Elections.

Topic VI.—Parliamentary procedure.

Topic VII.—Critical consideration of underlying principles of democracy.

REFERENCE BOOKS AND MATERIAL.

Choosing Your Life Work: Alberta Teachers' Association (1938).

B. C. Program of Studies for Jr. H. Schools (1936).

B. C. Program of Studies for Sr. H. Schools (1937)

(Bulletin 1.)

- Vocations Through Problems*: Edmondson and Dondineau (Macmillan) (1936).
- Guidance Working Material for Junior and Senior High Schools*: Frank Jones Clarke (Roosevelt H. S., Seattle).
- Guidance Leaflets*: Superintendent of Documents, Washington, D. C. Education Catalogue p. 18; e.g. Architecture (5c).
- Occupational Civics*: Giles (MacMillan Co.).
- The Jr. H. S. Manual* (State of Washington, Olympia).
- Pennsylvania Bulletin* 13.
- Calendars of Universities*.
- Regulations of the Dept. of Education*.
- Supply and Demand in the Professions in Canada*: Education Bulletin 18, Dominion Bureau of Statistics.
- Making a Living*: Lyon.
- I Find My Vocation*: Kitson.
- Labour Gazette*: Federal Govt.
- Occupations*: Brewer.
- Canada Year Book*.
- Publications of the Dept. of Labor*.
- Publications of the Dept. of Forestry, Mines, Public Works*.
- Census*: Dominion Bureau of Statistics.
- "Occupations"*: Vocational Guidance Magazine.
- Guidance in Secondary Schools*: Koos and Kefauver.
- Extra-curricular Activities*: McKown.
- Evaluating Extra-curricular Activities*.
- Home Room Guidance*: McKown.
- Procedure of Public Meetings*: Bourinot.
- Blue Book of Social Usage*: Emily Post.
- Measuring Intelligence*: Terman, Merrill (1937).
- Group Intelligence Scale, Grades 5-16* (World Book Co.).
- Group Test of Mental Ability Grades 7-12* (World Book Co.).
- Intelligence Examinations for H. S. Grades*: Thorndyke (Teachers' College Bureau of Publications).
- Vocational Guidance Test, Grades 12-13* (H. S. Arithmetic, Algebra, Geometry, Physics and Technical Information).
- Personal Inventory*: Bernreuter (Stanford University Press).
- Inor Group Guidance Series* by R. D. Allen (Inor Publishing Co.) (1934).
- Vol. 1. Common Problems in Group Guidance.
- Vol. 2. Case Conference Problems in Group Guidance.
- Vol. 3. Self-Measurement Problems in Group Guidance.
- Vol. 4. Organization, Supervision of Guidance in Public Education.
- Conduct Problems*: Charters.
- The Clearing House Magazine*.

OUTLINE OF REQUIREMENTS

1938-39

THIRD YEAR—GRADE XII (OLD COURSE).

N.B.—Details of all Courses except those included in these pages are obtainable in *The Hand-book for Secondary Schools, Alberta*.

The revised Programme for Grade XII will be introduced in September, 1939.

GRADE XII

English 4.

LITERATURE:

A.—Prose:

Carlyle: *Essay on Burns*.

Ruskin: *The Crown of Wild Olive*: Lecture I, Work; Lecture II, Traffic.

B.—Poetry: Shakespeare: *Macbeth*.

Milton and Representative Short Poems, Second Series (Oxford University Press).

*A study of the subject-matter of poetry.

(a) The Epic.

The characteristics of the epic, and the more important forms.

(b) The Lyric.

The characteristics of lyric poetry, and its more important forms.

(c) The Drama.

The characteristics of dramatic poetry, and the most common forms of the drama.

*The material for this study will be found on pages 7 to 10 of *Milton and Representative Short Poems, Second Series*.

For Memorization—

Macbeth.

Act I, Scene 3.

Lines 130-142—"This supernatural . . . but what is not."

Act I, Scene 5.

Lines 12-27—"Glamis thou art . . . crown'd withal."

Act II, Scene 1.

Lines 33-49—"Is this a dagger . . . thus to mine eyes."

Act III, Scene 1.

Lines 1-10—"Thou hast . . . in hope."

Act III, Scene 2.

Lines 13-26—"We have scotch'd . . . touch him further."

Act IV, Scene 1.

Lines 139-151—"Time, thou anticipatest . . . no more sights."

Act V, Scene 5.

Lines 19-28—"Tomorrow and . . . nothing."

L'Allegro.

Line 135-150—"And ever against Eurydice."

Lycidas.

Lines 108-131—"Last came smile no more."

Alexander's Feast.

Lines 155-170—"Thus long ago an angel down."

Memorial Verses.

Lines 6-14—"When Byron's eyes Titanic strife."

Essay on Burns.

In Par. 6—"An educated man stands . . . with his arms."

In Par. 18—"Independently of . . . all-conceiving spirit."

C.—SUPPLEMENTARY LITERATURE:

(a) Required—

Shakespeare: *The Tempest*.

Lytton: *Harold*.

Stevenson: *Travels with a Donkey*.

Gaskell: *Cranford*.

(b) Recommended, but not obligatory—

Thackeray: *Henry Esmond*.

Barrie: *The Little Minister*.

Bronte: *Jane Eyre*.

COMPOSITION:

Text-book:—Rhodes: *Effective Expression* (Gregg Publishing Company).

History of English Literature.

As outlined in *Hand-book* (1930 Edition).

The following should be added after Section 5 (b):

The lives, works, and places in literature of Thomas Huxley, John Ruskin, Matthew Arnold.

The great poets of the Victorian Age: Alfred Tennyson, Robert Browning.

The romancer and essayist of the Victorian Age: Robert Louis Stevenson.

Readings from the prescribed text-book: Wordsworth, "She Was a Phantom of Delight", "Influence of a Mountain Peak", "The World Is Too Much with Us"; Coleridge, "Kubla Khan"; Byron, "Wordsworth" (from English Bards and Scotch Reviewers), "The Bull Fight"; Shelley, "Ode to the West Wind"; Keats, "Ode on a Grecian Urn"; Lamb, "A Dissertation Upon Roast Pig"; De Quincey, "A Meeting with Lamb", "Incident of the Malay"; Scott, "First Meeting of Edgar and Lucy"; Jane Austen, "Elizabeth Has a Distinguished Visitor"; Macaulay, "London Coffee Houses"; Carlyle, "James Boswell"; Dickens, "Mrs. Micawber", "Uriah Heep"; Eliot, "Maggie Behaves Worse Than She Expected"; Thackeray, "Mrs. Crawley", "The Colonel and Little Rawdy"; Huxley, "The Method of Scientific Investigation"; Ruskin, "On Some Lines from Lycidas"; Arnold, "A Definition of Culture"; Tennyson, "Passages from In Memoriam", "Home They Brought Her Warrior Dead", "The Revenge"; Browning, "How They Brought the Good News from Ghent to Aix", "Incident of the French Camp", "My Last Duchess"; Stevenson, "El Dorado".

Text-book:—Pace: *English Literature, with Readings* (Revised Edition), (Allyn & Bacon). Text complete.

History 4.

(a) Modern European History.

Text-book:—Robinson: *Mediaeval and Modern Times* (Ginn & Co.), from page 268 to the end, with Chapters XV and XVI omitted.

(b) English Constitutional History.

Text-book:—Marriott: *English Political Institutions* (Oxford University Press), with the following Chapters omitted: V, VI, VIII, IX, XI-XIV (inclusive).

In this course, time should be given to the discussion of current events and questions of the present day.

Algebra 3.

Text-book:—Durrell & Wright: *A New Canadian Algebra* (Clarke Irwin Company), Chapters I-IX (inclusive). Revision exercises are to be used for checking, practice, and review.

Geometry 3.

N.B.—This course is no longer required for credit in Senior Matriculation at the University of Alberta. It is continued for those who wish a third unit in fourth year mathematics. It will give no extra credit at the University, but will be accepted as one of the optional units for the General and Normal Entrance courses. See pages 5 and 6.

Text-book:—McDougall and Sheppard: *Analytical Geometry for High Schools* (Copp Clark Company), with the following sections omitted: 56, 71-81 (inclusive), 111-117 (inclusive), 137-139 (inclusive), 159-164 (inclusive).

Trigonometry 1.

Text-book:—Conant: *Plane Trigonometry* (American Book Company), with Chapters X, XI, and XIV omitted.

Chemistry 2.

Text-books:—

Littler: *Elementary Chemistry*, Book II.

Littler: *Laboratory Manual* to accompany Book II.

This unit should be offered only in those schools where the instructor in Chemistry holds, at least, standing in Chemistry 2, or its equivalent, and where the laboratory equipment is adequate for performing all of the prescribed experiments.

The Introduction, Complex Silicates, pages 97-101, Chapter XII, Chromium, pages 234-236, Chapters XXII, XXIV, XXVI, and the Conclusion of the authorized text-book may be treated as required reading, and need not necessarily be taken up in class.

The following exercises from the Manual comprise the practical work of the year:

- (a) To be treated as demonstration experiments only: Exercises 14, 19 (No. 5 only), and 42.
- (b) To be treated either as demonstration experiments or to be required of all pupils, as the teacher may determine: Exercises 6, 27, and 39.

- (c) To be required of all pupils: Exercises 8, 9, 10, 13, 15, 16, 17, 21, 22, 25, 32 (Experiment 1 only), 33, 34, 35, 36, 37, 38, 40, 41, 43, 46, 50, 51, and 52.

It is felt that the above prescription should require roughly 30 periods in the laboratory, allowing two periods for Exercise 33, and four or five for Exercises 51 and 52. This does not include the time required for demonstrations by the teacher.

Each teacher of Chemistry 2 will be required to certify before June 30th, 1939, that his students have performed the laboratory experiments outlined in the authorized Manual.

In the examination in Chemistry 2, 85 per cent. of the marks will be based on the written examination; the other 15 per cent., on the laboratory work of the student. In submitting their certified statements, teachers will be required to give their estimate of the practical work of each student, by assigning him a mark from the total allotted for this part of the course. This mark will be added to that received by the student in his written examination.

For the purposes of the laboratory work, experiments performed in groups of two will be considered as individual work.

Teachers of Chemistry 2 are requested to note that the laboratory work of candidates should be graded. Only in those cases where all experiments have been performed and recorded with as great perfection as can be expected from a Grade XII student should the maximum be allowed. Candidates will be required to pass on the Laboratory work as well as on the paper on Theory. Physics 2.

Text-book:—Merchant, Chant and Cline: *Mechanics, an Elementary Text-book* (Copp Clark Company), omitting paragraphs 104, 113, 169, 170, and 218, and Chapters XXIV, XXV, XXVI, and XXVIII.

Biology (Grade XII).

The authorized text-book will supersede the outline in the *Hand-book*.

Text-book:—Phillips and Cox: *Elementary Biology* (Clarke, Irwin & Company), omitting Chapters XXVIII and XXIX.

Latin 3.

Grammar:—Bennett: *Latin Grammar* (Allyn & Bacon), (Teachers' reference).

Prose:—Baker and Inglis: *Latin Prose Composition*, Part II (Macmillan Co.), omitting Chapters IX, XVII, and XX.

Reading:—Bonney & Niddrie: *Latin Prose and Poetry* (Ginn & Company).

The following selections are required—

From Part I:

Vergil—Selection IX.

Ovid—Selections I, II and IX.

From Part II:

Livy—Selections I to VIII (inclusive).

Pliny—Selections I to IX (inclusive); and Selections XI and XII.

Catullus—Selections I to VI (inclusive).

French 3.

Grammar and Composition:—Fraser and Squair: *New Complete French Grammar* (Copp Clark Company).

In Part II, the following sections are to be omitted: 169, 171, 182, 183, 187, 196, 205, 207, 216, 217, and 419. Pages 1 to 92 of Part II, which deal with the verb, are required; but pages 92 to 208 are to be used by instructor and students for the purpose of reference only. The instructor should review the sections of Part I relating to the article, the numerals, the noun, pronoun, adjective, and adverb, with such additions from Part II as are obviously necessary for general practice. Special emphasis on continuous prose and free composition.

Teachers' Reference:—Ritchie and Moore: *Elementary French Composition* (Thos. Nelson & Sons).

Mérimée: *Colomba* (Dent & Sons). Edition prepared by Ford and Hicks.

German 3.

Text-books:—

Fraser and Van der Smissen: *High School German Grammar* (Copp Clark Company).

Reading:—Sudermann: *Die Heimat* (edited by Fraser and Van der Smissen), (D. C. Heath).

Hinz: *Das geheimnisvolle Dorf* (D. C. Heath).

Storm: *Immensee* (Macmillan).

